

PUBLIC HEALTH REPORTS

VOL. 36

JULY 8, 1921

No. 27

SICKNESS AMONG SCHOOL CHILDREN.

Loss of Time From School Among 6,130 School Children in 13 Localities in Missouri.¹

By SELWYN D. COLLINS, Assistant Statistician, United States Public Health Service.

At the present stage of our knowledge of disease problems, any records which show the true incidence of even a few diseases in an observed population are important. Ordinary morbidity reports as furnished by physicians to local health departments do not, for well-known reasons, give an accurate picture of the incidence of any disease in a definitely enumerated population group. It is necessary, therefore, to utilize other methods for obtaining the desired information.

In a general way, the most promising directions for seeking data of this character are: (1) Records of disability among groups of insured persons associated in various kinds of sick-benefit associations; (2) records of sickness in groups of persons employed in industrial establishments where careful medical supervision and a system of disability records have been established; (3) records of sickness in groups of individuals living in institutions or attending school; and (4) special surveys of population groups made for the specific purpose of ascertaining the incidence of a given disease or group of diseases.

In various prior publications the Public Health Service has presented statistics of disability among adult wage earners who are members of sick-benefit associations, and the results of special sickness surveys. In the hope of obtaining data regarding the incidence of diseases among children, an attempt was made in connection with the field studies in child hygiene in Missouri during 1919-20, to institute a system of sickness records in connection with the schools. This was undertaken purely as an experiment, and a limited number of schools were requested to cooperate with the Public Health Service for this purpose. The results are presented in the following pages. The work is being undertaken on a larger scale, not only in Missouri but in other States for the school session of 1921-22.

¹ From Field Investigations in Child Hygiene, United States Public Health Service. The statistical part of this study was conducted in the Statistical Office of the Public Health Service.

The data here presented were collected in 13 localities in the State of Missouri. These data were entered by the teachers on cards distributed by medical officers of the Public Health Service in charge of child hygiene studies in the several communities. A card was made out for each child, showing sex, color, and age, and record, by school months, of the total possible number of days of school attendance,¹ the days present, the days absent on account of sickness, and the days absent from causes other than sickness. The card also contained a record of the diseases the child had during each month of the session.

After the cards had been completed and collected, they were carefully edited for errors, and only those which seemed to be properly and accurately used were included in the tabulation. It is believed that the necessary selection of properly filled out cards did not eliminate a disproportionate number of any particular class, such as those showing an excessive amount of absence or attendance.

The records, even after careful editing, however, can be considered only as a preliminary experiment. The data were incomplete in many ways. Records showing the specific data desired on the card were kept only after the first of the year 1920, and in some localities they were begun even later. Data for the months prior to the beginning of any special records were taken from the regular school records and, therefore, vary in completeness in the different localities. The entries showing the specific diseases causing the absence were not complete; in the majority of cases the number of days absent because of sickness was shown without specifying the disease. It was therefore decided to compute only the percentages of the total possible days of school attendance which were lost on account of sickness of all kinds and of causes other than sickness, with certain other data based on those cards reporting the specific disease causing the absence.

Table I shows the size and location of the cities from which data were drawn. They range from one to twenty thousand in population, and are fairly representative, average-sized cities of the State. No data from the larger cities were included.

¹ It was found that, according to the prevailing custom in keeping school records of enrollment, a child's name was dropped from the roll after three days' absence and reentered when he returned. In tabulating the records for the purpose of counting the absence from school on account of sickness, a child's name was not dropped from the roll except when he was permanently separated from the school, as in the case of a child who left the community, or who went to work, or some similar case. With this difference, the total possible number of days of school attendance is the total number of days enrolled during the period used for the computation.

TABLE I.—*Population and location of certain cities in Missouri and the number of children for whom sickness records were obtained in each place.*

City.	County.	Population of city, 1920.	Number of children included.
Sedalia.....	Pettis.....	21,144	1,367
Jefferson City.....	Cole.....	14,490	660
Independence.....	Jackson.....	11,686	909
Cape Girardeau.....	Cape Girardeau.....	10,252	230
Warrensburg.....	Johnson.....	4,811	446
Excelsior Springs.....	Clay.....	4,163	302
Bonne Terre.....	St. Francis.....	3,816	641
West Plains.....	Howell.....	3,178	436
Liberty.....	Clay.....	3,067	351
Farmington.....	St. Francis.....	2,685	421
Jackson.....	Cape Girardeau.....	2,114	154
Montgomery.....	Montgomery.....	1,688	16
Oregon.....	Holt.....	904	137

Table II, computed from the basic data shown in Table VII (see appended tables), shows by months the percentages of the total possible number of days of school attendance which were lost on account of sickness and of causes other than sickness. The data are shown by sex and for two age groups.

TABLE II.—*Percentages of total possible number of days of school attendance which were lost on account of sickness and of causes other than sickness for each month of the school year 1919-20, in certain localities in Missouri.*

Cause of absence, sex, and age group.	Total school year.	1919				1920				
		Septem-ber.	Octo-ber.	Novem-ber.	Decem-ber.	Janu-ary.	Febru-ary.	March.	April.	May.
Sickness:										
Both sexes—										
All ages (6 to 18).....	5.6	1.3	2.5	4.2	5.5	6.3	11.6	6.9	5.8	3.6
6 to 10.....	6.9	1.3	3.0	5.4	6.7	7.5	13.9	8.9	7.6	4.7
11 to 18.....	4.1	1.3	2.0	2.9	4.2	4.9	9.0	4.7	4.0	2.4
Boys—										
All ages (6 to 18).....	5.4	1.2	2.3	4.0	4.8	6.1	11.9	6.6	5.8	3.2
6 to 10.....	6.7	1.2	2.7	5.0	5.7	7.4	14.0	8.7	7.5	4.1
11 to 18.....	3.9	1.2	2.0	3.0	3.8	4.5	9.5	4.3	3.8	2.3
Girls—										
All ages (6 to 18).....	5.8	1.4	2.7	4.4	6.2	6.6	11.4	7.2	5.9	4.0
6 to 10.....	7.2	1.4	3.3	5.8	7.6	7.7	13.8	9.1	7.7	5.3
11 to 18.....	4.2	1.4	1.9	2.9	4.6	5.3	8.6	5.1	4.1	2.6
Other causes:										
Both sexes—										
All ages (6 to 18).....	3.0	2.0	2.5	2.6	3.3	3.1	4.0	3.2	2.9	2.7
6 to 10.....	2.9	2.2	2.8	2.6	3.4	3.3	3.9	2.8	2.5	2.6
11 to 18.....	3.1	1.9	2.2	2.6	3.2	3.0	4.1	3.6	3.3	2.8
Boys—										
All ages (6 to 18).....	3.2	2.2	2.8	2.6	3.7	3.4	4.4	3.5	3.1	3.1
6 to 10.....	3.1	2.2	3.2	2.7	3.8	3.6	4.3	3.0	2.6	2.8
11 to 18.....	3.4	2.2	2.3	2.6	3.6	3.1	4.6	4.0	3.8	3.4
Girls—										
All ages (6 to 18).....	2.7	1.9	2.2	2.5	2.9	2.9	3.6	2.9	2.6	2.3
6 to 10.....	2.6	2.2	2.5	2.5	3.0	3.0	3.5	2.6	2.4	2.3
11 to 18.....	2.7	1.5	2.1	2.5	2.8	2.9	3.7	3.3	2.8	2.2

As between the sexes, absence on account of sickness is, with some exceptions, greater for girls than for boys. The differences, however, are so small that they can hardly be considered significant. The

absence from causes other than sickness is greater for boys than for girls in practically all cases. Although the differences are not great, they persist in all months and therefore seem to indicate that causes other than sickness were responsible for a greater amount of absenteeism among boys than among girls.

From the point of view of age, the younger group seems to lose more time because of sickness than the older group. The percentages of total possible days of attendance which were lost on account

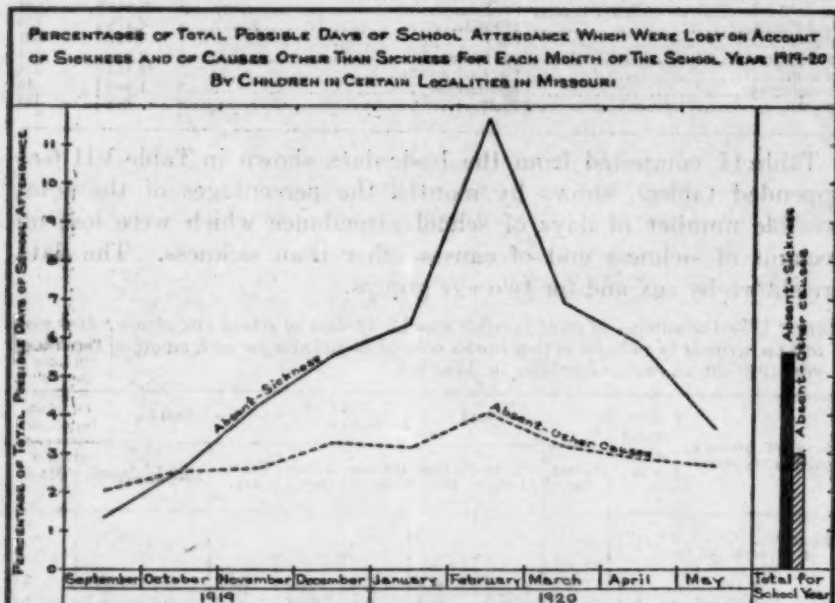


Fig. 1.

of sickness is greater for the younger group in practically all cases. The differences are large enough to be significant and suggest one of three things: that a larger number of cases of sickness occurred among the younger children, or that they recovered more slowly, or that they were kept at home for less serious illness or for a longer time after recovery than was the case with the older children. Unfortunately, the data available for this study were not in such a shape that the question could be settled as to which was actually the case.

Absence from causes other than sickness seems to differ less for the two age groups than absence from sickness. For the year as a whole, the children of the older group were absent slightly more from causes other than sickness than were those of the younger group. As to the seasonal distribution of such absence, the younger group seems to have more absence in the first half of the year, but less in the last half. However, the differences are too slight to be significant; but since the tendency is so general and applies to all groups, it is worth noting.

Figure I shows, for both sexes and all ages, the percentages of time lost from school because of sickness and of causes other than sickness for each month of the school year.

The unusually high peak in February, 1920, is obviously due to the influenza epidemic. Of the days lost on account of sickness from known diseases in that month, 46 per cent were due to influenza, and 34 per cent of the cases of illness of known cause were due to influenza. Reference to Table IV will show that the percentages of days lost and of cases of influenza were not large except in January and February; the curve, therefore, approximates sickness in a normal year except for those months.

In view of the consistently greater time lost on account of sickness by the younger of the two age groups, Table III was prepared to show the time lost on account of sickness and of causes other than sickness for children of each year of age from 6 to 16 years, inclusive, for the school session. The data are presented graphically in Figure 2.

TABLE III.—Time lost from school on account of sickness and of other causes, by children each year of age from 6 to 16 years, inclusive, during the school year 1919-20, in certain localities in Missouri.

Age in years.	Number of children.	Total possible number of days of school attendance.	Percentage of total possible days of school attendance lost on account of sickness.	Percentage of total possible days of school attendance lost on account of other causes.
All ages (6 to 16).....	6,099	665,449	5.6	3.0
6.....	404	49,480	9.7	3.8
7.....	627	65,157	8.6	3.0
8.....	651	67,605	6.7	2.8
9.....	745	84,764	6.1	2.5
10.....	741	83,627	4.9	2.6
11.....	754	84,982	4.0	2.3
12.....	731	80,083	4.2	3.1
13.....	618	62,246	4.0	3.0
14.....	475	51,040	3.6	2.9
15.....	261	26,425	4.9	3.9
16.....	92	9,040	3.9	3.3

The time lost from sickness shows no great variations nor any consistent trend from 11 to 16 years of age, but decreases considerably and consistently from 6 to 11 years. Absence from causes other than sickness shows no marked differences for the different ages. If any trend whatever is shown, it indicates increasing absence for the older children, but the items are irregular and the increasing trend is slight only.

The specific diseases causing absence were reported in 2,326 cases, resulting in 14,373 days' absence from school (see appended Tables VIII and IX). On the basis of these known cases, certain computations were made as to the relative importance of certain diseases as a cause of absence in each month of the school year. Because of the fact that the influenza epidemic made certain

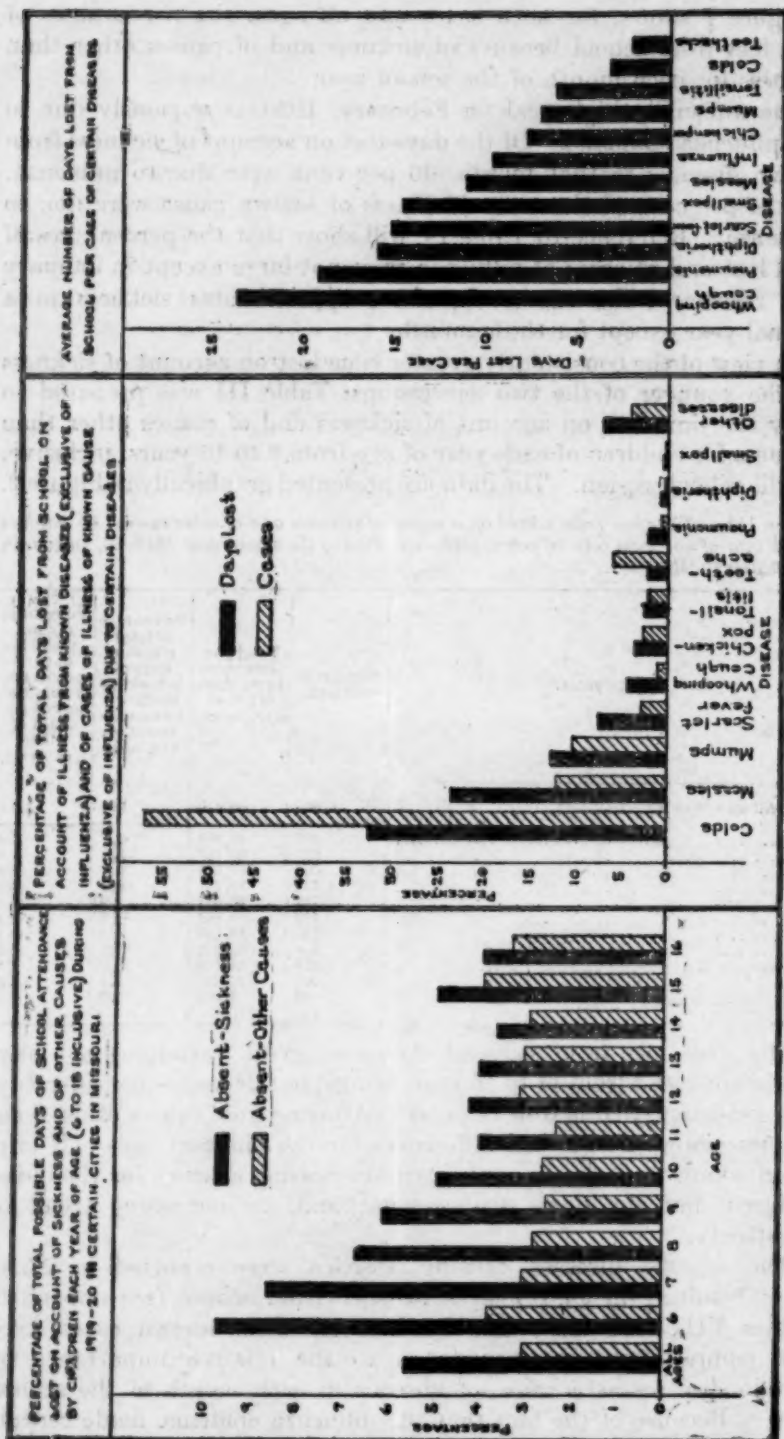


Fig. 2.

Fig. 3.

Fig. 1.

months of this school year exceptional, the cases of and the absences due to influenza were deducted from this total number, and the proportion of cases of and of days lost from all diseases, exclusive of influenza, were computed for each disease for each month of the school year. For example, absence because of sickness of known cause in March was 2,528 days; but of this total, 223 days were due to influenza, leaving 2,305 days due to other known diseases. Of this total absence from known diseases, 543 days, or 23.6 per cent, were due to measles. Similar percentages were worked for other diseases and for each month to show the relative importance of certain diseases in causing absence from school at different seasons of the year after eliminating the abnormal condition resulting from influenza. Table IV shows the results of these computations.

TABLE IV.—Percentages of total number of days lost from school on account of all illness of known cause (exclusive of influenza), and percentages of total cases of illness of known cause (exclusive of influenza) due to certain diseases, among children 6 to 18 years of age, in certain localities in Missouri during 1919-20.

Disease.	Total school year.	1919				1920				
		September.	October.	November.	December.	January.	February.	March.	April.	May.
PERCENTAGE DUE TO EACH DISEASE.										
Days lost:										
All diseases (exclusive of influenza).....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Colds.....	32.5	47.1	41.3	34.1	50.8	52.3	33.0	33.1	16.7	15.6
Measles.....	23.5				8	4	16.0	23.6	54.7	48.1
Mumps.....	12.8		1.4	1.4	2.6	16.2	11.6	19.7	15.3	13.6
Scarlet fever.....	7.5	14.3	30.1	29.4	19.7	7.4	5.9	2.7	.7	.7
Whooping cough.....	4.4		5.9	7.8	7.7	4.4	5.4	3.6	.3	6.6
Chicken pox.....	3.6		2.3	9.7	3.2	2.7	6.6	4.5	.7	
Tonsillitis.....	2.6		1.0	3.5	2.8	2.3	3.1	2.2	2.5	2.8
Pneumonia.....	2.3		1.4	1.3		5.1	5.0	1.9	1.1	
Toothache.....	2.3	2.1	3.0	3.3	1.8	2.2	3.0	1.8	2.2	2.1
Diphtheria.....	.8			2.0	3.4		.9		.7	.5
Smallpox.....	.5						.7	.9	.2	1.4
Other diseases.....	7.2	36.5	13.6	7.5	7.2	7.0	8.5	6.0	4.7	8.6
Cases:										
All diseases (exclusive of influenza).....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Colds.....	57.0	71.2	70.1	61.0	75.3	72.6	56.1	56.9	36.6	41.0
Measles.....	12.1				.5	.3	8.7	11.5	23.1	27.7
Mumps.....	10.3		1.3	1.6	3.0	10.7	10.1	13.8	13.5	15.1
Scarlet fever.....	2.8	6.5	9.1	13.0	7.1	2.2	2.5	.7	.3	
Whooping cough.....	1.1		2.6	1.6	.5	.0	1.7	.7	.3	2.4
Chicken pox.....	2.7		1.3	6.5	2.5	1.9	4.8	3.5	.8	
Tonsillitis.....	2.4		1.3	2.4	1.5	2.2	3.1	2.8	2.2	2.4
Pneumonia.....	.7		1.3			1.9	.8		1.1	
Toothache.....	6.1	3.2	9.1	9.0	4.6	3.8	6.2	5.4	7.8	7.2
Diphtheria.....	.3			.8	1.0		.3		.3	.6
Smallpox.....	.2						.6	.2		.6
Other diseases.....	4.3	16.1	3.9	4.1	4.0	3.5	5.1	4.5	4.0	3.0
PERCENTAGE OF TOTAL DAYS LOST FROM ILLNESS OF KNOWN CAUSE AND OF TOTAL CASES OF ILLNESS OF KNOWN CAUSE DUE TO INFLUENZA.										
Days lost:										
Influenza.....	17.7	3.6		2.1	4.6	18.1	46.3	8.8	2.8	
Cases:										
Influenza.....	11.2	3.1		1.6	3.9	12.2	33.9	3.8	1.9	

It is a striking fact that colds were the greatest single assigned cause of absence in every month of the school year. The other infectious diseases are more or less seasonal in character; measles was an important cause of absence from February to May, scarlet fever from September to December. Seasonal variation was not such an outstanding fact in the other cases, but existed for most of the common infectious diseases.

Children are more disposed to some diseases at certain ages, and therefore the relative importance of those diseases as causes of absence from school varies with age. In order to show this variation, Tables V and VI were prepared, showing by age groups the percentages of the total number of days lost from sickness of known cause which were due to certain diseases. Similar computations were made for the percentages of cases and the days lost per case of these diseases.

TABLE V.—Percentage of days lost from diseases of known cause and of cases of illness of known cause due to certain diseases among children in certain localities in Missouri, by age groups.

Disease.	Days lost.			Cases.		
	All ages (6 to 18).	6 to 10 years of age.	11 to 18 years of age.	All ages (6 to 18).	6 to 10 years of age.	11 to 18 years of age.
PERCENTAGE OF ALL ILLNESS FROM KNOWN CAUSE (EXCLUSIVE OF INFLUENZA, DUE TO CERTAIN DISEASES.						
All diseases (exclusive of influenza).....	100.0	100.0	100.0	100.0	100.0	100.0
Colds.....	32.5	28.4	41.0	57.0	52.8	63.2
Measles.....	21.5	28.6	12.9	12.1	16.7	5.5
Mumps.....	12.8	12.0	14.5	10.3	10.9	9.5
Scarlet fever.....	7.5	8.2	6.0	2.8	3.2	2.3
Whooping cough.....	4.4	6.3	3	1.1	1.7	1
Chicken pox.....	3.6	4.2	2.5	2.7	3.5	1.4
Tonsillitis.....	2.6	1.4	5.0	2.4	1.3	4.0
Toothache.....	2.3	1.6	3.8	6.1	6.0	7.8
Pneumonia.....	2.3	2.2	2.4	.7	.7	.7
Diphtheria.....	.8	.5	1.4	.3	.2	.4
Smallpox.....	.5	.6	.4	.2	.2	.1
Other diseases.....	7.2	6.0	9.8	4.3	3.8	5.0

PERCENTAGE OF ALL ILLNESS FROM KNOWN CAUSE DUE TO INFLUENZA.

Influenza.....	17.7	16.0	21.0	11.2	10.5	12.2
----------------	------	------	------	------	------	------

TABLE VI.—Average number of days lost from school per case of certain diseases among children in certain localities in Missouri, by age groups.

Disease.	All ages (6 to 18).	6 to 10 years of age.	11 to 18 years of age.
All diseases.....	6.2	6.9	5.1
Whooping cough.....	23.5	24.1	9.5
Pneumonia.....	19.2	22.1	15.3
Diphtheria.....	15.9	14.0	17.8
Scarlet fever.....	15.1	16.5	12.2
Smallpox.....	14.5	14.3	15.0
Measles.....	11.1	11.2	10.7
Influenza.....	9.7	10.5	8.8
Chicken pox.....	7.8	7.7	7.8
Mumps.....	7.1	7.1	7.1
Tonsillitis.....	6.2	7.1	5.8
Colds.....	4.8	3.5	3.0
Toothache.....	2.2	2.1	2.2
Other diseases.....	9.6	10.2	8.9

Figure 3 shows graphically the relative importance of these diseases as measured in days lost and in cases of illness among children of 6 to 18 years of age, inclusive. Figure 4 shows the severity of cases of various diseases as measured in the average time lost from school per case.

For the year as a whole, the children lost, on account of sickness, an average of 5.6 per cent of the days that school was in session. Assuming that this percentage of days of sickness is representative of the whole year, it means an average of slightly over 20 days of sickness per child per year. Boys were absent on account of sickness almost as much as girls, the difference being only 0.4 of 1 per cent, which, on an annual basis, would mean about 20 days of sickness for boys and about 21 for girls.

The data presented here are, of course, insufficient to afford conclusions of a general nature, but it is believed that they do suggest that the use of school records for obtaining facts as to disease incidence among children is practicable. Such facts, it is unnecessary to say, would be of great value, not only to those who are interested in epidemiology, but to school and health administrators.

TABLE VII.—*Number of children included in the study, total possible number of days of school attendance, and days absent on account of sickness and of causes other than sickness, by months, for the school year 1919-20, in certain localities in Missouri.*

Age and sex.	Total school year.	1919.				1920.				
		Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.
All ages:										
Both sexes—										
Number of children....	6,130	2,701	2,793	2,856	2,920	3,340	3,608	5,348	5,494	4,377
Total possible days of school attendance....	669,214	54,020	55,960	57,120	58,400	66,700	72,160	107,765	110,269	86,920
Days absent—Sickness....	37,368	717	1,401	2,422	3,219	4,226	8,391	7,424	6,430	3,138
Days absent—Other causes....	19,802	1,090	1,402	1,470	1,915	2,094	2,902	3,438	3,102	2,320
Boys—										
Number of children....	2,870	1,332	1,382	1,413	1,447	1,650	1,779	2,512	2,624	2,115
Total possible days of school attendance....	325,150	26,640	27,640	28,260	28,940	33,000	35,580	50,601	52,633	41,856
Days absent—Sickness....	17,442	326	646	1,138	1,396	2,000	4,228	3,333	3,029	1,340
Days absent—Other causes....	10,555	583	769	744	1,066	1,111	1,575	1,764	1,640	1,294
Girls—										
Number of children....	3,260	1,369	1,411	1,443	1,473	1,690	1,829	2,836	2,870	2,262
Total possible days of school attendance....	344,064	27,380	28,220	28,860	29,460	33,700	36,580	57,164	57,630	45,064
Days absent—Sickness....	19,926	391	755	1,284	1,823	2,226	4,163	4,091	3,401	1,792
Days absent—Other causes....	9,247	516	633	720	849	983	1,327	1,674	1,513	1,026
6 to 10 years:										
Both sexes—										
Number of children....	3,173	1,421	1,476	1,516	1,542	1,808	1,923	2,801	2,821	2,220
Total possible days of school attendance....	351,313	28,420	29,520	30,320	30,840	36,160	38,460	56,244	56,496	44,853
Days absent—Sickness....	24,413	376	884	1,634	2,059	2,724	5,347	4,991	4,290	2,108
Days absent—Other causes....	10,078	623	813	787	1,035	1,190	1,507	1,570	1,408	1,149
Boys—										
Number of children....	1,497	692	720	743	753	885	946	1,322	1,375	1,091
Total possible days of school attendance....	170,611	13,840	14,400	14,860	15,060	17,700	18,920	26,576	27,552	21,703
Days absent—Sickness....	11,352	167	384	737	863	1,305	2,649	2,299	2,065	883
Days absent—Other causes....	5,300	303	400	400	507	638	814	800	706	612
Girls—										
Number of children....	1,676	729	756	773	789	923	977	1,479	1,446	1,128
Total possible days of school attendance....	180,702	14,580	15,120	15,460	15,780	18,460	19,540	29,668	28,944	23,150
Days absent—Sickness....	13,061	209	500	897	1,196	1,420	2,698	2,692	2,224	1,225
Days absent—Other causes....	4,778	320	353	387	468	548	693	770	702	537
11 to 18 years:										
Both sexes—										
Number of children....	2,957	1,280	1,317	1,340	1,378	1,532	1,685	2,547	2,673	2,148
Total possible days of school attendance....	317,901	25,600	26,340	26,800	27,560	30,540	33,700	51,521	53,773	42,067
Days absent—Sickness....	12,955	341	517	788	1,160	1,502	3,044	2,433	2,140	1,030
Days absent—Other causes....	9,724	476	589	683	880	908	1,395	1,868	1,754	1,171
Boys—										
Number of children....	1,373	640	662	670	694	765	833	1,190	1,249	1,024
Total possible days of school attendance....	154,539	12,800	13,240	13,400	13,880	15,300	16,690	24,025	25,081	20,153
Days absent—Sickness....	6,090	159	262	401	533	695	1,579	1,034	964	463
Days absent—Other causes....	5,255	280	309	344	409	473	761	964	943	682
Girls—										
Number of children....	1,584	640	655	670	684	767	852	1,357	1,424	1,124
Total possible days of school attendance....	163,362	12,800	13,100	13,400	13,680	15,240	17,040	27,496	28,692	21,914
Days absent—Sickness....	6,865	182	255	387	627	806	1,465	1,399	1,177	567
Days absent—Other causes....	4,460	190	280	330	381	435	634	904	811	489

TABLE VIII.—Number of days lost from school on account of sickness of known cause and number of cases of known diseases among school children 6 to 18 years of age, in certain localities in Missouri during 1919-20.¹

Disease.	Total school year.	1919				1920				
		Septem-ber.	Octo-ber.	Novem-ber.	Decem-ber.	Janu-ary.	Feb-ruary.	March.	April.	May.
Days lost:										
All known diseases.....	14,373	98	356	793	1,176	1,764	4,008	2,528	2,533	1,117
All known diseases (exclusive of influenza).....	11,832	95	356	777	1,122	1,445	2,154	2,306	2,461	1,117
Influenza.....	2,541	3		16	54	319	1,854	223	72	
Cases:										
All known diseases.....	2,326	32	77	125	206	361	537	444	373	166
All known diseases (exclusive of influenza).....	2,065	31	77	123	198	317	355	427	371	166
Influenza.....	261	1		2	8	44	182	17	7	

¹ Data given here are for only the small part of the total absence from sickness in which the specific disease was reported.

TABLE IX.—Number of days lost from school on account of sickness of known cause and number of cases of each known disease causing absence among children 6 to 18 years of age, in certain localities in Missouri during 1919-20.¹

Disease.	Days lost.			Cases.		
	All ages (6 to 18).	6 to 10 years of age.	11 to 18 years of age.	All ages (6 to 18).	6 to 10 years of age.	11 to 18 years of age.
All known diseases.....	14,373	9,523	4,850	2,326	1,378	950
All known diseases (exclusive of influenza).....	11,832	8,001	3,831	2,065	1,231	834
Influenza.....	2,541	1,522	1,019	261	145	116
Cold.....	3,843	2,273	1,570	1,177	650	527
Measles.....	2,785	2,290	495	251	206	46
Mumps.....	1,512	955	557	213	134	79
Scarlet fever.....	891	659	232	59	40	19
Whooping cough.....	516	506	10	22	21	1
Chicken pox.....	427	333	94	55	43	12
Tonsillitis.....	305	113	192	49	16	33
Toothache.....	275	129	146	128	61	66
Pneumonia.....	269	177	92	14	8	6
Diphtheria.....	96	42	54	6	3	3
Smallpox.....	58	43	15	4	3	1
Other diseases.....	855	481	374	89	47	42

¹ Data given here are for only the small part of the total absence from sickness in which the specific disease was reported.

DISINFECTANT TESTING BY THE HYGIENIC LABORATORY METHOD.

The following method for determining the phenol coefficient of disinfectants supersedes the methods described in previous publications of the Public Health Service and is the present Hygienic Laboratory method.

No single method can serve as a means of comparing the value in practice of disinfectants of greatly diverse composition and destined

for a variety of applications. However, disinfectants which are chemically related to phenol, which are to be used against organisms reacting similarly to the manner in which the typhoid bacillus reacts and which are destructive within the time and temperature limits of this test, may be compared as to their disinfecting properties within these limitations by means of this test. The results may be useful in the selection of a potent product, in making comparisons of cost in terms of service rendered, and in checking successive batches of the same product.

This method was submitted to several different laboratories for trial before its adoption, and the results seem to justify the belief that the personal equation in the performance of the tests does not play an inordinate rôle.

THE TEST CULTURE.

The test culture is a culture of *Bacillus typhosus*, Hopkins strain. Between periods of testing it is maintained on nutrient agar stabs, transferred at monthly intervals.

For at least 5 days before the test the culture is transferred at 24-hour intervals to successive tubes of the meat extract broth described below and incubated at 37° C. Transfers are made with one standard loopful. The culture is filtered through sterile filter paper just before using. The test is performed with a 24-hour culture.

THE PHENOL.

The phenol must comply with the requirements of the Eighth United States Pharmacopoeia. Particularly the congealing point must not be below 40° C. The crystals are kept in tightly stoppered amber-colored bottles in a dark and relatively cool place.

A 5 per cent original solution is made by adding 1 part by weight of phenol, liquefied by warming the bottle, to 19 parts of distilled water. A fresh solution is made for each day's use.

THE CULTURE MEDIUM.

Make meat extract medium as follows:

Beef extract (Liebig's)	3 gm.
Peptone (Armour's for disinfectant testing) ..	10 gm.
Sodium chloride	5 gm.
Water, distilled	1,000 c. c.

Boil for 15 minutes.

Make up to original weight by addition of water.

Filter through paper.

Tube, 10 c. c. to each tube.

Sterilize.

The p_H value of this medium should be between 6.0 and 7.0.

GLASSWARE AND APPARATUS.

Glassware for measuring must be accurately graduated. It must be clean, dry, and sterile at the time of use. There will be needed—

1 c. c. capacity pipettes.

5 c. c. capacity pipettes.

1 c. c. delivery pipettes, graduated in tenths.

5 c. c. delivery pipettes.

100 c. c. measuring cylinders, graduated in 1 c. c., glass stoppered.

Seeding tubes, 1 x 3 inches, flared tops, round bottoms.

Racks consisting of blocks of wood with rows of holes for both the seeding tubes (before they are placed in the water bath) and the subculture tubes.

Wire loops must be carefully made and kept from damage. They are made as follows: A close cylindrical spiral is made by winding a piece of platinum wire, No. 23, B. & S. gauge, as tightly as possible about a piece of steel or other hard wire having a diameter of 0.072 inch (No. 13, B. & S. gauge) to complete a little more than four full turns. The long end of the wire is then bent sharply at right angles to the wound portion and parallel to the steel wire. The core is removed and the short end of the wire is clipped off so as to leave exactly four full turns to the coil. The successive turns of the spiral must touch one another continuously. The long end of the wire is attached to an aluminum handle.

A convenient support is provided on which to rest the loops so that a batwing Bunsen burner may be placed under each one successively.

A constant temperature bath is provided, capable of maintaining the seeding tubes at 20° C. during the time of the test. A well-insulated bath of large volume relative to the surface exposed is sufficient without thermoregulating appliances.

Disinfectant testing machine.—The use of a disinfectant testing machine is optional. One is described in Reprint No. 462 from the Public Health Reports. A few modifications have proved useful. For example, the use of platinum instead of nichrome loops, and the practice of sterilizing the subculture tubes covered with padded inverted troughs in the racks.

DILUTIONS.

Dilutions of phenol and of disinfectants are made from the original liquid on the day of the test. For the dilutions of the disinfectant, a 5 per cent solution is made by adding 5 c. c. of the disinfectant to 95 c. c. of sterile distilled water. A standardized 5 c. c. capacity pipette is used for this purpose. After filling the pipette, all excess of the disinfectant on the outside of the pipette is wiped off with

sterile gauze. The contents of the pipette are then delivered into a cylinder containing 95 c. c. of sterile distilled water and the pipette is washed out as clean as possible by aspiration and blowing out the contents into the cylinder. The contents of the cylinder are then thoroughly shaken and the dilutions up to 1:500 are made from it, using delivery pipettes for measuring. For those disinfectants which do not readily form a 5 per cent solution, make a 1 per cent solution, and from this make the dilutions greater than 1:100 in accordance with the second table of dilutions. If greater dilutions than 1:500 are to be made, a 1 per cent solution is made from the 5 per cent solution and the higher dilutions are made from this.

For the higher dilutions, delivery pipettes may be used. The following scale is used for making dilutions:

For dilutions up to 1:70, increase or decrease by a difference of 5 (i. e., 5 parts of water); from 1:70 to 1:160, by a difference of 10; from 1:160 to 1:200, by a difference of 20; from 1:200 to 1:400, by a difference of 25; from 1:400 to 1:900, by a difference of 50; from 1:900 to 1:1800, by a difference of 100; from 1:1800 to 1:3200, by a difference of 200; and so on if higher dilutions are necessary.

It is important that the cylinders used for making the dilutions be correctly graduated. It is preferable to use standardized cylinders and pipettes. For making the dilutions in accordance with the above scheme, the following tables are of service:

Tables useful in making dilutions.

[5 c. c. of disinfectant + 95 c. c. of distilled water = Solution A.]

Dilution.	c. c. of A.	c. c. of dist. water.	c. c. c. of dist. A. water.	c. c. of dist. A.	c. c. of dist. water.	Dilution.	c. c. c. of dist. A. water.	c. c. c. of dist. A. water.	c. c. c. o. of dist. A. water									
1:20	20	+	0	or 10	0	or 4	+	0	1:140	20	+	120	or 10	+	60	or 4	+	24
1:25	20	+	5	or 10	25	or 4	+	1	1:150	20	+	130	or 10	+	65	or 4	+	26
1:30	20	+	10	or 10	5	or 4	+	2	1:160	20	+	140	or 10	+	70	or 4	+	28
1:35	20	+	15	or 10	75	or 4	+	3	1:175	20	+	150	or 10	+	75	or 4	+	30
1:40	20	+	20	or 10	10	or 4	+	4	1:180	20	+	160	or 10	+	80	or 4	+	32
1:45	20	+	25	or 10	125	or 4	+	5	1:200	20	+	180	or 10	+	90	or 4	+	36
1:50	20	+	30	or 10	15	or 4	+	6	1:200	20	+	180	or 4	+	35	or 2	+	18
1:55	20	+	35	or 10	175	or 4	+	7	1:225	20	+	205	or 4	+	41	or 2	+	205
1:60	20	+	40	or 10	20	or 4	+	8	1:250	20	+	230	or 4	+	46	or 2	+	23
1:65	20	+	45	or 10	225	or 4	+	9	1:275	20	+	255	or 4	+	51	or 2	+	255
1:70	20	+	50	or 10	25	or 4	+	10	1:300	20	+	280	or 4	+	56	or 2	+	28
1:70	20	+	50	or 10	25	or 4	+	10	1:325	20	+	305	or 4	+	61	or 2	+	305
1:80	20	+	60	or 10	30	or 4	+	12	1:350	20	+	330	or 4	+	66	or 2	+	33
1:90	20	+	70	or 10	35	or 4	+	14	1:375	20	+	355	or 4	+	71	or 2	+	355
1:100	20	+	80	or 10	40	or 4	+	15	1:400	20	+	380	or 4	+	76	or 2	+	38
1:110	20	+	90	or 10	45	or 4	+	18	1:450	20	+	430	or 4	+	86	or 2	+	43
1:120	20	+	100	or 10	50	or 4	+	20	1:500	20	+	480	or 4	+	96	or 2	+	48
1:130	20	+	110	or 10	55	or 4	+	22										

Tables useful in making dilutions—Continued.

If c. c. of disinfectant + 99 c. c. of distilled water = Solution B.

Dilution.	c. c. c. c. of of dist. B. water.	c. c. c. c. of of dist. B. water.	c. c. c. c. of of dist. B. water.	Dilution.	c. c. c. c. of of dist. B. water.	c. c. c. c. of of dist. B. water.	c. c. c. c. of of dist. B. water.
1:100	= 100 + 0	or 10 + 0		1:650	= 10 + 55	or 4 + 22	or 2 + 11
1:110	= 100 + 10	or 10 + 1		1:700	= 10 + 60	or 4 + 24	or 2 + 12
1:120	= 100 + 20	or 10 + 2		1:750	= 10 + 65	or 4 + 26	or 2 + 13
1:130	= 100 + 30	or 10 + 3		1:800	= 10 + 70	or 4 + 28	or 2 + 14
1:140	= 100 + 40	or 10 + 4		1:850	= 10 + 75	or 4 + 30	or 2 + 15
1:150	= 100 + 50	or 10 + 5		1:900	= 10 + 80	or 4 + 32	or 2 + 16
1:160	= 100 + 60	or 10 + 6		1:900	= 5 + 40	or 4 + 32	or 2 + 16
1:160	= 100 + 60	or 10 + 6		1:1,000	= 5 + 45	or 4 + 36	or 3 + 18
1:180	= 100 + 80	or 10 + 8		1:1,100	= 5 + 50	or 4 + 40	or 2 + 20
1:200	= 100 + 100	or 10 + 10		1:1,200	= 5 + 55	or 4 + 44	or 2 + 22
1:200	= 100 + 100	or 10 + 10	or 4 + 4	1:1,300	= 5 + 60	or 4 + 48	or 2 + 24
1:225	= 100 + 125	or 10 + 12½	or 4 + 5	1:1,400	= 5 + 65	or 4 + 52	or 2 + 26
1:250	= 100 + 150	or 10 + 15	or 4 + 6	1:1,500	= 5 + 70	or 4 + 56	or 2 + 28
1:275	= 100 + 175	or 10 + 17½	or 4 + 7	1:1,600	= 5 + 75	or 4 + 60	or 2 + 30
1:300	= 100 + 200	or 10 + 20	or 4 + 8	1:1,700	= 5 + 80	or 4 + 64	or 2 + 32
1:325	= 100 + 225	or 10 + 22½	or 4 + 9	1:1,800	= 5 + 85	or 4 + 68	or 2 + 34
1:350	= 100 + 250	or 10 + 25	or 4 + 10	1:1,800	= 5 + 85	or 4 + 68	or 2 + 34
1:375	= 100 + 275	or 10 + 27½	or 4 + 11	1:2,000	= 5 + 95	or 4 + 76	or 2 + 38
1:400	= 100 + 300	or 10 + 30	or 4 + 12	1:2,200	= 5 + 105	or 4 + 84	or 2 + 42
1:400	= 10 + 30	or 4 + 12	or 2 + 6	1:2,400	= 5 + 115	or 4 + 92	or 2 + 46
1:450	= 10 + 35	or 4 + 14	or 2 + 7	1:2,600	= 5 + 125	or 4 + 100	or 2 + 50
1:500	= 10 + 40	or 4 + 16	or 2 + 8	1:2,800	= 5 + 135	or 4 + 108	or 2 + 54
1:550	= 10 + 45	or 4 + 18	or 2 + 9	1:3,000	= 5 + 145	or 4 + 116	or 2 + 58
1:600	= 10 + 50	or 4 + 20	or 2 + 10	1:3,200	= 5 + 155	or 4 + 124	or 2 + 62

METHOD.

This description applies to the hand method. For the use of the machine, follow the procedure of Reprint No. 462 from the Public Health Reports.

The object is to add 0.1 c. c. of typhoid culture to 5 c. c. of successive dilutions of the disinfectant and of phenol, and, after this addition, to transfer a loopful of each mixture to a separate subculture tube at periods of 5, 7½, 10, 12½, and 15 minutes. The subculture tubes are then incubated for 48 hours at 37° C., and readings of growth or no growth are made and recorded.

Dilutions are made to cover the expected range of the disinfectant, and 5 c. c. of each dilution is placed in a seeding tube. Dilutions of phenol are made as follows: 1:80, 1:90, 1:100, 1:110, 1:120, and 1:130, and 5 c. c. of each is placed in a seeding tube.

The seeding tubes are placed in the water bath at 20° C. and a few minutes are allowed for their contents to reach this temperature.

To each seeding tube 0.1 c. c. of culture is then added seriatim, allowing 15 seconds for each addition. If there are 10 tubes of disinfectant dilutions, this will occupy 2½ minutes. At the end of 5 minutes from the time of adding the disinfectant to the first seeding tube, a loopful of the mixture is transferred from this tube to a subculture tube, and this is done from each successive seeding tube at 15-second intervals. This procedure is repeated after the lapse of 7½, 10, 12½, and 15 minutes from the time of the first addition of culture to the seeding tube. Each loop is placed on the support and flamed with the Bunsen burner immediately after use, and the use of

several loops permits them to cool before they are needed again. The operator is therefore obliged to make a transfer every 15 seconds for 10 minutes.

The culture is best added to the seeding tube by holding the latter in a slanting position and touching the tip of the 1 c. c. pipette to the wetted surface exposed on its upper side. One-tenth c. c. is run in at the proper time and thorough admixture is assured by gentle shaking.

The dilutions of phenol are next treated in the same manner as those of the disinfectant.

The tubes are properly labeled and are placed in the incubator for 48 hours, at the end of which time readings of growth or no growth are made and entered in a table as + or - signs, respectively.

In the nature of the test it is unavoidable that discrepancies in the even oblique slant of the plus signs across the chart will occasionally be encountered; but if these are numerous, a faulty technique is indicated and the test should be discarded. The same applies to accidentally contaminated tubes.

DETERMINATION OF COEFFICIENT.

The coefficient is the arithmetic mean of the sum of three ratios, expressed decimally. These ratios are, the denominator of the highest dilution of the disinfectant in whose subculture tube no growth occurs, divided by the corresponding figure for phenol, for the 5, 10, and 15 minute intervals, respectively.

Example:

Sample.	Dilution.	Time of exposure in minutes.				
		5	7½	10	12½	15
Disinfectant.....	1: 700	—	—	—	—	—
	1: 800	+	—	—	—	—
	1: 900	+	+	—	—	—
	1: 1,000	+	+	+	+	—
	1: 1,100	+	+	+	+	+
Phenol.....	1: 80	—	—	—	—	—
	1: 90	+	—	—	—	—
	1: 100	+	+	+	+	—
	1: 110	+	+	+	+	—
	1: 120	+	+	+	+	+
	1: 130	+	+	+	+	+

$$\text{Coefficient} = \frac{\frac{700}{80} + \frac{900}{90} + \frac{1000}{110}}{3} = \frac{8.7 + 10.0 + 9.0}{3} = 9.2$$

ECONOMIC DEPRESSION AND PELLAGRA INCIDENCE.

The fear expressed by officers of the Public Health Service last fall,¹ that the economic depression was likely to be followed by an increase of pellagra in the summer of 1921, is being realized. Observations and inquiries by officers of the service indicate a markedly increasing prevalence of the disease in many localities. The information at hand is as yet too incomplete to permit of generalization but it seems probable that the number of cases will be more than double what they were last year (1920) in the localities for which information is at hand.

It is evident that economic pressure is producing an unfavorable effect on the diet. The animal foods are being excessively reduced, thus bringing about an unbalanced diet consisting too largely of cereals. Unless this tendency to an unbalancing of the diet is stopped at once by keeping up the supply of milk, cheese, lean meat (fish, fowl, pork), and fresh vegetables, there is serious danger of a return of the alarming conditions experienced in 1915 following the depression resulting from the outbreak of the World War in 1914.

SERIES OF TYPHOID CASES ORIGINATING IN A BACILLUS CARRIER.

In a report from Asst. Surg. Gen. L. L. Williams, at Marine Hospital No. 19, San Francisco, Calif., dated June 16, 1921, an account is given of the occurrence of nine cases of typhoid fever among the members of the crew of the steamship *Lake Gunn*, which evidently originated in a carrier who was a member of the crew.

The carrier (H. L.), a fireman, was admitted to the hospital for observation on May 30, and the typhoid bacillus was demonstrated in his urine. He informed the medical officer in charge that he had had typhoid fever in New Orleans, where he was discharged from the hospital on April 26, and had shipped on the *Lake Gunn* on the following day. The nine cases from the vessel were all admitted to the hospital between May 25 and June 6.

The vessel was visited by a medical officer of the Public Health Service, who examined the water and ice with negative results. The information secured from each of the patients suggested no other common source of infection; and so there seems to be little doubt that this group of cases originated in the typhoid bacillus carrier.

¹ Public Health Reports, vol. 35, No. 46, 1921, Reprint No. 621.

A THERMOMETER BASKET.

**A CONVENIENT DEVICE IN USE AT UNITED STATES PUBLIC HEALTH SERVICE HOSPITAL
NO. 56, FORT McHENRY, MD.**

To facilitate the taking of a large number of temperatures, especially of tuberculous patients, the accompanying cut shows an arrangement whereby sterile thermometers as well as soiled ones may be conveniently carried in test-tube holders. An ordinary mechanic can make a number of these baskets from materials that are at hand in practically every Public Health Service hospital.

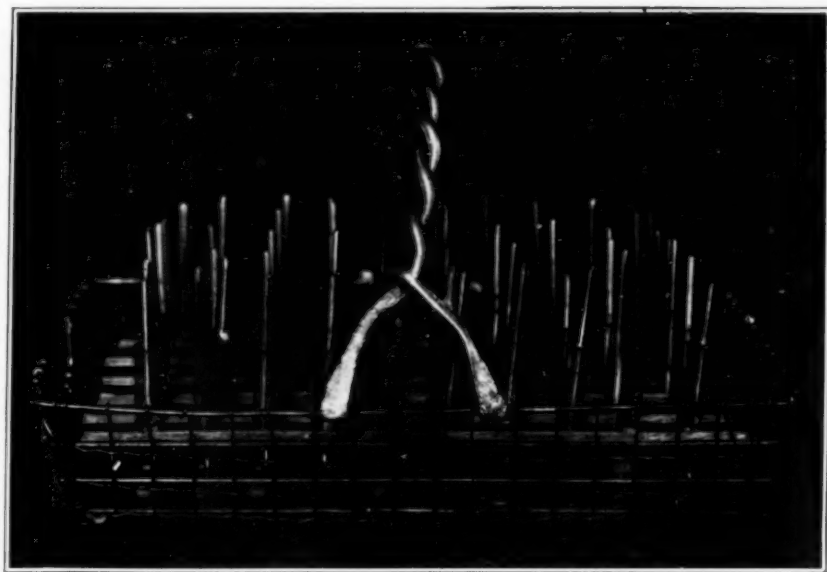
DETAILS.

Wire letter basket: Top measurements, 14 by 10 inches; bottom measurements, 13 by 9 inches; bottom covered with aluminum $\frac{1}{8}$ inch thick. Two trays of aluminum, one directly over the other, each fitted with 60 holes, 10 lengthwise, 6 crosswise; middle tray, $13\frac{1}{4}$ by $9\frac{1}{4}$ inches; top tray, $13\frac{1}{4}$ by $9\frac{1}{4}$ inches; two cleats, or extensions on each end, the cleats of the middle tray being bent over the first wire from the bottom, and those of the top tray bent over the first wire from the top of the basket, holding the trays in proper positions. The handle is made of two pieces of aluminum wire, twisted together and bent around the wire rim at the sides of the basket.

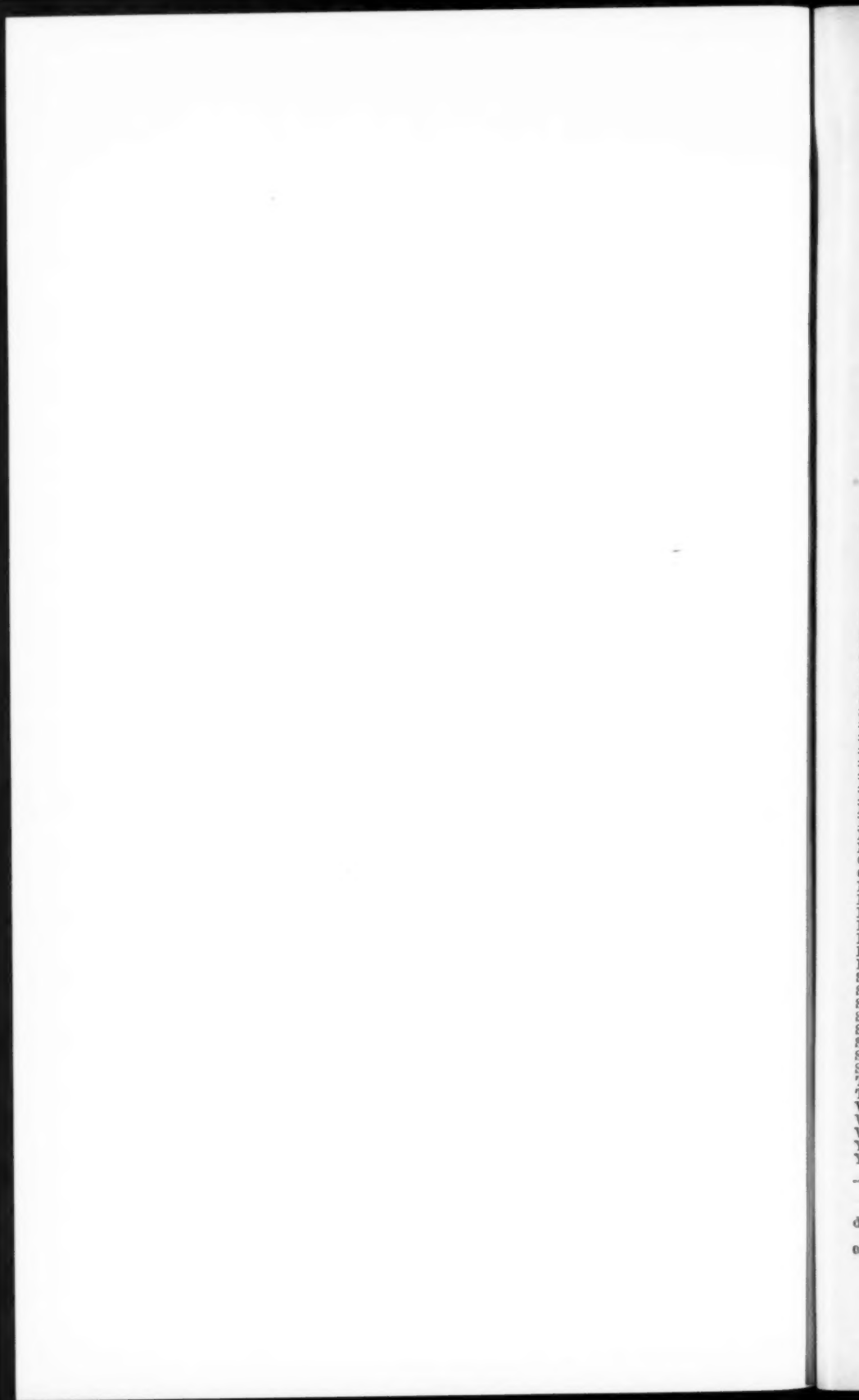
DEATHS DURING WEEK ENDED JUNE 25, 1921.

Summary of information received by telegraph from industrial insurance companies for week ended June 25, 1921, and corresponding week, 1920. (From the "Weekly Health Index," June 28, 1921, issued by the Bureau of the Census, Department of Commerce.)

	Week ended June 25, 1921.	Corresponding week, 1920.
Policies in force.....	47, 225, 626	44, 055, 769
Number of death claims.....	7, 787	8, 117
Death claims per 1,000 policies in force.....	8.6	9.6



Thermometer basket in use in tuberculosis wards at U. S. P. H. S. Hospital No. 56, Fort McHenry, Md.



Deaths from all causes in certain large cities of the United States during the week ended June 25, 1921, infant mortality, annual death rate, and comparison with corresponding week of preceding years. (From the "Weekly Health Index," June 28, 1921, issued by the Bureau of the Census, Department of Commerce.)

City.	Estimated population, July 1, 1921.	Week ended June 25, 1921.		Average annual death rate per 1,000. ³	Deaths under 1 year.		Infant mortality rate, week ended June 25, 1921. ³
		Total deaths.	Death rate. ¹		Week ended June 25, 1921.	Previous year or years. ²	
Akron, Ohio.....	229,195	25	5.7	*9.5	4	*7	38
Albany, N. Y.....	115,071	34	15.4	C 17.4	5	C 4	67
Atlanta, Ga.....	207,473	66	16.6	C 18.5	13	C 11	87
Baltimore, Md.....	752,863	185	12.8	A 14.0	31	A 31	87
Birmingham, Ala.....	186,133	51	14.3	A 21.1	9	A 12	65
Boston, Mass.....	757,634	204	14.0	A 15.8	24	A 34	76
Bridgeport, Conn.....	149,967	24	8.3	A 15.1	6	A 8	85
Buffalo, N. Y.....	519,608	109	10.9	C 10.5	22	C 11	80
Cambridge, Mass.....	110,444	29	13.7	A 10.7	5	A 3	80
Camden, N. J.....	119,672	32	13.9	.....	8	.....	.....
Chicago, Ill.....	2,780,655	551	10.3	A 13.2	84	A 107	70
Cincinnati, Ohio.....	403,418	124	16.0	C 14.8	12	C 19	78
Cleveland, Ohio.....	831,138	157	9.9	C 10.3	29	C 17	78
Columbus, Ohio.....	245,558	51	10.8	C 10.9	.....	C 5	.....
Dallas, Tex.....	165,282	21	6.6	A 15.7	5	A 5	66
Dayton, Ohio.....	158,119	29	9.6	C 9.1	4	C 5	79
Denver, Colo.....	263,152	69	13.7	A 12.8	4	.....	45
Detroit, Mich.....	1,070,450	189	9.2	C 12.0	42	C 50	85
Fall River, Mass.....	120,668	24	10.1	C 14.7	3	C 5	47
Grand Rapids, Mich.....	141,197	34	12.6	C 11.6	5	C 8	72
Houston, Tex.....	144,340	44	15.9	.....	8	.....	40
Indianapolis, Ind.....	325,215	78	12.5	C 15.1	6	C 12	53
Jersey City, N. J.....	302,788	58	10.0	C 9.7	12	C 4	40
Kansas City, Kans.....	103,884	20	10.0	C 5.1	3	C 1	170
Kansas City, Mo.....	336,157	79	12.3	C 14.3	11	C 13	70
Los Angeles, Calif.....	611,921	162	13.8	A 14.1	16	A 12	138
Louisville, Ky.....	236,083	93	20.5	C 11.5	12	C 0	64
Lowell, Mass.....	113,757	16	7.3	A 13.8	4	A 7	53
Memphis, Tenn.....	165,389	73	23.0	C 23.0	8	C 7	40
Milwaukee, Wis.....	468,386	80	8.9	A 10.1	11	A 13	51
Minneapolis, Minn.....	392,815	86	11.4	C 11.3	7	C 7	50
Nashville, Tenn.....	122,986	40	17.1	C 15.4	2	C 8	31
New Bedford, Mass.....	125,012	23	9.6	A 15.2	2	A 5	83
New Haven, Conn.....	167,007	34	10.6	C 13.0	7	C 4	17
New Orleans, La.....	394,657	126	16.6	A 17.4	13	A 17	192
New York, N. Y.....	5,751,867	1,147	10.4	C 10.8	150	C 192	59
Newark, N. J.....	424,885	98	12.0	C 13.5	12	C 13	0
Norfolk, Va.....	121,260	22	9.5	.....	0	.....	51
Oakland, Calif.....	226,472	40	9.2	A 10.1	4	A 4	.....
Omaha, Nebr.....	197,066	37	9.8	.....	4	.....	.....
Paterson, N. J.....	137,463	34	12.9	.....	7	.....	53
Philadelphia, Pa.....	1,866,212	380	10.6	*12.7	44	*54	82
Pittsburgh, Pa.....	602,452	126	10.9	C 14.2	23	C 31	40
Portland, Oreg.....	264,859	58	11.4	C 11.2	4	C 4	11
Providence, R. I.....	239,645	57	12.4	C 13.1	10	C 11	170
Richmond, Va.....	175,695	59	17.5	C 17.2	14	C 6	70
Rochester, N. Y.....	305,229	47	8.0	C 10.1	9	C 9	50
St. Louis, Mo.....	786,164	146	9.7	C 13.1	14	C 15	31
St. Paul, Minn.....	257,781	48	10.5	C 9.5	5	C 0	29
Salt Lake City, Utah ¹	121,595	16	6.9	A 9.4	2	A 3	25
San Francisco, Calif.....	520,546	140	14.0	C 10.4	5	C 7	87
Seattle, Wash.....	327,227	43	6.9	A 8.8	3	A 6	60
Spokane, Wash.....	104,442	29	14.5	C 13.0	4	C 4	108
Springfield, Mass.....	135,877	25	9.6	C 11.5	4	C 6	91
Syracuse, N. Y.....	177,265	39	11.5	C 11.4	9	C 6	70
Toledo, Ohio.....	253,696	72	10.7	A 15.0	9	A 8	86
Trenton, N. J.....	122,760	28	11.9	A 17.2	7	A 6	127
Washington, D. C.....	454,026	118	13.6	A 16.3	12	A 13	.....
Wilmington, Del.....	113,408	30	13.8	C 13.1	3	.....	.....
Worcester, Mass.....	184,972	34	9.6	C 12.4	8	C 6	86
Yonkers, N. Y.....	103,324	13	6.6	A 11.5	2	A 3	.....
Youngstown, Ohio.....	139,432	26	9.7	C 12.0	10	C 9	.....

¹ Annual rate per 1,000 population.

² "A" indicates data for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates data for the corresponding week of the year 1920.

³ Deaths under 1 year per 1,000 births—an annual rate based on deaths under 1 year for the week and estimated births for 1920. Cities left blank are not in the registration area for births.

⁴ Data based on statistics of 1915, 1916, and 1917.

PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

UNITED STATES.

CURRENT STATE SUMMARIES.

Telegraphic Reports for Week Ended July 2, 1921.

These reports are preliminary and the figures are subject to change when later returns are received by the State health officers.

ALABAMA.		CALIFORNIA—continued	
	Cases.		Cases.
Diphtheria.....	8	Smallpox:	
Hockworm.....	179	San Francisco.....	16
Malaria.....	10	Scattering.....	18
Measles.....	15	Typhoid fever:	
Mumps.....	21	San Lorenzo.....	8
Ophthalmia neonatorum.....	1	Scattering.....	5
Pellagra.....	4		
Scarlet fever.....	17		
Smallpox:			
Houston County.....	28		
Jefferson County.....	11		
Scattering.....	17		
Tetanus.....	2		
Tuberculosis.....	29		
Typhoid fever.....	41		
Whooping cough.....	3		
ARKANSAS.		COLORADO.	
Chicken pox.....	14	(Exclusive of Denver.)	
Diphtheria.....	7	Chicken pox.....	2
Malaria.....	179	Diphtheria.....	16
Measles.....	11	Lethargic encephalitis.....	1
Pellagra.....	17	Measles.....	26
Scarlet fever.....	4	Scarlet fever.....	6
Smallpox.....	4	Smallpox.....	25
Tuberculosis.....	6	Typhoid fever.....	3
Typhoid fever.....	34	Whooping cough.....	1
Whooping cough.....	20		
CALIFORNIA.		CONNECTICUT.	
Cerebrospinal meningitis:		Chicken pox.....	14
Los Angeles.....	1	Conjunctivitis (infectious).....	2
Los Angeles County.....	1	Diphtheria.....	29
San Francisco.....	2	German measles.....	1
Influenza.....	8	Measles:	
Lethargic encephalitis—San Francisco.....	1	Hartford.....	9
Rabies in man—Los Angeles.....	1	Willimantic.....	10
		Scattering.....	22
		Mumps.....	30
		Pneumonia (lobar).....	11
		Poliomyelitis.....	2
		Scarlet fever.....	16
		Tuberculosis (pulmonary).....	32
		Typhoid fever.....	7
		Whooping cough.....	62
		FLORIDA.	
		Diphtheria.....	11
		Influenza.....	1
		Malaria.....	13

FLORIDA—continued.

	Cases.
Measles.....	12
Pneumonia.....	1
Smallpox.....	22
Typhoid fever.....	8

GEORGIA.

Chicken pox.....	7
Diphtheria.....	9
Dysentery (bacillary).....	10
Hookworm.....	10
Influenza.....	1
Malaria.....	66
Measles.....	14
Mumps.....	4
Paratyphoid fever.....	1
Pneumonia.....	3
Poliomyelitis.....	1
Scarlet fever.....	4
Septic sore throat.....	4
Smallpox.....	17
Tuberculosis (pulmonary).....	6
Typhoid fever.....	90
Whooping cough.....	7

ILLINOIS.

Cerebrospinal meningitis:	
Augusta.....	1
Chicago.....	2
Monmouth.....	1
Diphtheria:	
Chicago.....	114
Scattering.....	39
Influenza.....	2
Lethargic encephalitis—Chicago.....	3
Pneumonia.....	79
Poliomyelitis:	
Chicago.....	1
Kincaid.....	1
Lake County—Libertyville Township.....	3
Springfield.....	3
Waukegan.....	2
Scarlet fever:	
Chicago.....	43
Scattering.....	23
Smallpox:	
Wayne County—Mount Erie Township... ..	8
Scattering.....	38
Typhoid fever.....	27

INDIANA.

Diphtheria.....	24
Poliomyelitis.....	1
Scarlet fever.....	42
Smallpox.....	36
Typhoid fever.....	12

IOWA.

Diphtheria.....	21
Poliomyelitis.....	1
Scarlet fever.....	32
Smallpox.....	84

KANSAS.

Chicken pox.....	19
Diphtheria.....	29
Dysentery (bacillary).....	2
Measles.....	45

KANSAS—continued.

	Cases.
Mumps.....	4
Pellagra.....	2
Pneumonia.....	1
Scarlet fever.....	24
Smallpox.....	46
Tetanus.....	1
Tuberculosis.....	67
Typhoid fever.....	13
Whooping cough.....	60

LOUISIANA.

Diphtheria.....	5
Scarlet fever.....	2
Smallpox.....	6
Typhoid fever.....	19

MAINE.

Chicken pox.....	9
Diphtheria.....	15
German measles.....	1
Measles.....	46
Mumps.....	4
Pneumonia.....	3
Scarlet fever.....	10
Smallpox.....	7
Typhoid fever.....	1
Whooping cough.....	4

MARYLAND.¹

Cerebrospinal meningitis.....	2
Chicken pox.....	31
Diphtheria.....	36
Diarrhea (acute).....	2
Dysentery.....	10
German measles.....	6
Influenza.....	1
Malaria.....	5
Measles.....	64
Mumps.....	16
Ophthalmia neonatorum.....	2
Pneumonia (all forms).....	20
Poliomyelitis.....	4
Scarlet fever.....	14
Tuberculosis.....	72
Typhoid fever.....	25
Whooping cough.....	122

MASSACHUSETTS.

Anthrax.....	1
Cerebrospinal meningitis.....	3
Chicken pox.....	108
Conjunctivitis (suppurative).....	10
Diphtheria.....	118
German measles.....	10
Influenza.....	2
Lethargic encephalitis.....	1
Measles.....	202
Mumps.....	79
Ophthalmia neonatorum.....	13
Pneumonia (lobar).....	46
Poliomyelitis.....	4
Scarlet fever.....	81
Septic sore throat.....	1
Tetanus.....	1
Tuberculosis (all forms).....	203
Typhoid fever.....	13
Whooping cough.....	146

¹ Week ended Friday.

MINNESOTA.		NEW MEXICO.	
	Cases.		Cases.
Cerebrospinal meningitis.....	32	Cerebrospinal meningitis.....	1
Vicinity of Sebeka.....	10	Chicken pox.....	2
Chicken pox.....	38	Diphtheria.....	20
Diphtheria.....	27	Dysentery.....	1
Measles.....	8	Malaria.....	1
Poliomyelitis:		Measles.....	2
Vicinity of Ada.....	2	Mumps.....	2
Scattering.....	30	Pellagra.....	1
Scarlet fever.....	71	Pneumonia.....	2
Smallpox.....	50	Scarlet fever.....	1
Tuberculosis.....	6	Smallpox.....	1
Typhoid fever.....		Tuberculosis.....	49
		Typhoid fever.....	6
		Whooping cough.....	9
MISSISSIPPI.		NEW YORK.	
Diphtheria.....	3	(Exclusive of New York City.)	
Scarlet fever.....	13	Diphtheria.....	133
Smallpox.....	17	Measles.....	629
Typhoid fever.....	53	Pneumonia.....	94
		Scarlet fever.....	129
		Smallpox.....	10
		Typhoid fever.....	19
		Whooping cough.....	351
MISSOURI.		NORTH CAROLINA.	
Cerebrospinal meningitis.....	1	Chicken pox.....	12
Chicken pox.....	6	Diphtheria.....	15
Diphtheria.....	34	Measles.....	72
Epidemic sore throat.....	1	Poliomyelitis.....	4
Measles.....	19	Scarlet fever.....	16
Mumps.....	8	Septic sore throat.....	1
Scarlet fever.....	32	Smallpox.....	25
Smallpox.....	25	Typhoid fever.....	120
Tetanus.....	1	Whooping cough.....	156
Tuberculosis.....	43		
Typhoid fever.....	21		
Whooping cough.....	97		
MONTANA.		SOUTH DAKOTA.	
Diphtheria.....	3	Chicken pox.....	2
Scarlet fever.....	5	Diphtheria.....	3
Smallpox.....	28	Measles.....	20
Typhoid fever.....	1	Scarlet fever.....	7
		Smallpox.....	16
		Tuberculosis.....	1
		Typhoid fever.....	1
		Whooping cough.....	3
NEBRASKA.		TEXAS.	
Chicken pox.....	9	Diphtheria.....	18
Diphtheria:		Measles.....	32
Anschmo.....	8	Mumps.....	19
Scattering.....	4	Scarlet fever.....	18
Measles.....	18	Smallpox.....	16
Mumps.....	1	Typhoid fever.....	7
Poliomyelitis.....	3	Typhus fever—Temple.....	2
Scarlet fever.....	18	Whooping cough.....	30
Smallpox.....	17		
Trachoma.....	2		
Typhoid fever.....	1		
Whooping cough.....	15		
NEW JERSEY.		VERMONT.	
Cerebrospinal meningitis.....	3	Chicken pox.....	40
Chicken pox.....	80	Diphtheria.....	8
Diphtheria.....	83	Measles.....	82
Influenza.....	1	Mumps.....	7
Malaria.....	3	Pneumonia.....	6
Measles.....	199	Scarlet fever.....	21
Pneumonia.....	45	Smallpox.....	3
Poliomyelitis.....	2	Typhoid fever.....	6
Scarlet fever.....	95	Whooping cough.....	67
Trachoma.....	1		
Typhoid fever.....	13		
Whooping cough.....	177		

VIRGINIA.		WISCONSIN.	
	Cases.	Milwaukee:	Cases.
Smallpox—Scott County.....	3	Cerebrospinal meningitis.....	1
WASHINGTON.		Chicken pox.....	17
Chicken pox.....	23	Diphtheria.....	24
Diphtheria.....	29	Measles.....	11
Measles.....	78	Scarlet fever.....	8
Mumps.....	10	Smallpox.....	5
Scarlet fever.....	17	Tuberculosis.....	28
Smallpox.....	43	Typhoid fever.....	3
Tuberculosis.....	5	Whooping cough.....	28
Typhoid fever.....	8	Scattering:	
Whooping cough.....	32	Chicken pox.....	59
WEST VIRGINIA.		Diphtheria.....	33
Diphtheria:		Measles.....	45
Wheeling.....	12	Poliomyelitis.....	1
Scattering.....	7	Scarlet fever.....	44
Measles—Wheeling.....	8	Smallpox.....	92
Scarlet fever.....	6	Tuberculosis.....	20
Smallpox.....	3	Typhoid fever.....	4
Typhoid fever.....	3	Whooping cough.....	144

Reports for Week Ended June 25, 1921.

DISTRICT OF COLUMBIA.		KENTUCKY—continued.	
	Cases.		Cases.
Chicken pox.....	11	Lethargic encephalitis—Jefferson County.....	2
Diphtheria.....	4	Measles:	
Measles.....	79	Jefferson County.....	10
Scarlet fever.....	6	Scattering.....	10
Tuberculosis.....	22	Mumps.....	6
Typhoid fever.....	5	Pneumonia.....	4
Whooping cough.....	21	Scarlet fever.....	6
KENTUCKY.		Septic sore throat.....	1
Chicken pox.....	3	Smallpox.....	6
Diphtheria.....	6	Trachoma.....	1
Dysentery.....	8	Tuberculosis:	
German measles.....	1	Jefferson County.....	12
Influenza.....	1	Scattering.....	5
		Typhoid fever.....	17
		Whooping cough.....	13

SUMMARY OF CASES REPORTED MONTHLY BY STATES.

The following summary of monthly State reports is published weekly and covers only those States from which reports are received during the current week:

State.	Cerebrospinal meningitis.	Diphtheria.	Influenza.	Malaria.	Measles.	Pellagra.	Poliomyelitis.	Scarlet fever.	Smallpox.	Typhoid fever.
MAY, 1921.										
California.....	7	576	137	17	1,796	3	8	465	424	47
Colorado.....	2	214	1		541			243	390	40
Delaware.....	1	14		2	5			71		2
Hawaii.....	2	23	4		30			1		17
Kansas.....	2	142	10		1,472		2	305	786	33
New York.....	4	2,362	73		5,373		1	2,249	74	85
North Carolina.....	6	72			1,444		1	71	353	128
Ohio.....	12	657	13	1	1,418		6	964	1,084	150
Oregon.....	2	48	3	1	344			39	132	2
Pennsylvania.....	15	1,354		1	4,058		1	1,823	14	125
Virginia.....	5	90	467	315	1,694	13	2	173	139	113
Washington.....		99			347			127	570	35

PLAGUE.¹

HUMAN CASES OF PLAGUE REPORTED.

Place.	Period covered.	Cases.	Deaths.	Remarks.
California:	1921.			
San Benito County.....	Feb. 7.....	.....	1	
	June 11.....	1		

¹ A summary of the reports received of the occurrence of plague and the finding of plague-infected rodents in the United States during 1920 was published in Public Health Reports, Jan. 7, 1921, p. 15.

PLAGUE-INFECTED RODENTS.

Place.	Period covered.	Rodents found plague infected.
California:	1921.	
San Benito County.....	May 15 to June 4.....	18
	June 5-18.....	0
Florida:		
Pensacola.....	Jan. 1 to Apr. 18.....	5
	Apr. 19 to July 2.....	0
Louisiana:		
New Orleans.....	Jan. 1 to May 26.....	38
	May 27 to July 2.....	0
Texas:		
Galveston.....	Jan. 1 to May 28.....	1
	May 29 to July 2.....	0

¹ Ground squirrels, *Citellus beecheyi*.

TYPHUS FEVER.

Navajo Indian Reservation, Shiprock, N. Mex.—June 27, 1921.

Between June 16 and June 27, 3 deaths from typhus fever occurred on the Navajo Indian Reservation near Shiprock, N. Mex. No new cases were reported during that period.

CITY REPORTS FOR WEEK ENDED JUNE 18, 1921.

ANTHRAX.¹

City.	Cases.	Deaths.
Massachusetts:		
Lynn.....	1	
New York:		
New York.....	1	

¹ Report of one case of anthrax at Cleveland, Ohio, Public Health Reports, June 10, 1921, p. 1340, was an error, further investigation having shown that the case was not one of anthrax.

CITY REPORTS FOR WEEK ENDED JUNE 18, 1921—Continued.

CEREBROSPINAL MENINGITIS.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1920, inclusive. In instances in which data for the full six years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended June 18, 1921.		City.	Median for previous years.	Week ended June 18, 1921.	
		Cases.	Deaths.			Cases.	Deaths.
Alabama:				Michigan:			
Birmingham.....	0	1	1	Detroit.....	2	2	1
Montgomery.....	0	1	1	Highland Park.....	0	1	.....
California:				Missouri:			
Los Angeles.....	0	2	1	Springfield.....	0	.....	1
Connecticut:				New York:			
Waterbury.....	0	1	1	Buffalo.....	0	1	1
Georgia:				New York.....	10	8	3
Macon.....	0	.....	1	Pennsylvania:			
Maryland:				Philadelphia.....	1	3	1
Baltimore.....	1	.....	1	Tennessee:			
Massachusetts:				Nashville.....	0	1	1
Boston.....	2	1	.....	Virginia:			
Everett.....	0	1	.....	Danville.....	0	.....	1
Peabody.....	.....	1	1	Richmond.....	0	1	1

DIPHTHERIA.

See p. 1578; also Telegraphic weekly reports from States, p. 1568, and Monthly summaries by States, p. 1571.

INFLUENZA.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
California:			New York:		
Berkeley.....	1	.....	Buffalo.....	2	.....
Long Beach.....	2	.....	Cohoes.....	1	.....
Oakland.....	3	.....	New York.....	11	6
Georgia:			Saratoga Springs.....	3	.....
Atlanta.....	1	.....	Ohio:		
Illinois:			Columbus.....	2	.....
Chicago.....	6	1	Pennsylvania:		
Oak Park.....	1	1	Philadelphia.....	3	2
Maryland:					
Baltimore.....	4	1			

LETHARGIC ENCEPHALITIS.

California:			Oregon:		
San Francisco.....	2	2	Portland.....	1	.....
Ohio:					
Mansfield.....	1	.....		

MALARIA.

Alabama:			New York:		
Anniston.....	1	.....	New York.....	7	.....
Birmingham.....	1	.....	Pennsylvania:		
Georgia:			Philadelphia.....	1	.....
Brunswick.....	11	.....	South Carolina:		
Savannah.....	.....	1	Charleston.....	.....	4
Illinois:			Texas:		
Oak Park.....	1	1	Beaumont.....	.....	1
Louisiana:			Dallas.....	3	.....
New Orleans.....	1	.....	Waco.....	1	.....
New Jersey:			Vermont:		
Faterson.....	1	.....	Rutland.....	1	.....

CITY REPORTS FOR WEEK ENDED JUNE 18, 1921—Continued.

MEASLES.

See p. 1578; also Telegraphic weekly reports from States, p. 1568, and Monthly summaries by States, p. 1571.

PELLAGRA.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Georgia:			Pennsylvania:		
Atlanta.....		1	Philadelphia.....	1	1
Brunswick.....		1	South Carolina:		
Louisiana:			Charleston.....		2
Monroe.....	1	1	Tennessee:		
New Orleans.....	1		Nashville.....	1	
Massachusetts:			Texas:		
Boston.....	1		Dallas.....	1	1
North Carolina:					
Charlotte.....		1			
Wilmington.....		1			

PNEUMONIA (ALL FORMS).

Alabama:			Kansas:		
Birmingham.....		7	Fort Scott.....		1
Mobile.....		1	Kansas City.....	1	
Arizona:			Wichita.....		3
Tucson.....		2	Kentucky:		
California:			Covington.....		1
Alameda.....	1		Lexington.....		3
Berkeley.....		1	Louisville.....		5
Los Angeles.....	15	4	Louisiana:		
Oakland.....	6	5	Alexandria.....		1
San Diego.....	1		New Orleans.....		4
San Francisco.....	6		Maine:		
Santa Cruz.....		1	Bath.....		2
Stockton.....		1	Biddeford.....		1
Colorado:			Portland.....		2
Denver.....		5	Maryland:		
Pueblo.....		1	Baltimore.....	25	15
Connecticut:			Cumberland.....		2
Bridgeport.....		4	Massachusetts:		
Bristol.....	1		Boston.....	14	8
Hartford.....		2	Cambridge.....	4	2
Meriden.....	4	2	Chelsea.....	1	
Milford.....	2		Chicopee.....		3
New Haven.....		1	Clinton.....	2	
Waterbury.....		3	Everett.....	3	
Delaware:			Fall River.....	4	3
Wilmington.....		2	Gardner.....		1
District of Columbia:			Greenfield.....		1
Washington.....		4	Haverhill.....	1	
Georgia:			Holyoke.....	2	
Atlanta.....		2	Lowell.....	5	
Savannah.....		1	Methuen.....		1
Illinois:			New Bedford.....		4
Alton.....		1	Newburyport.....		1
Aurora.....		1	Northampton.....	2	
Bloomington.....		2	Pittsfield.....	1	
Blue Island.....		1	Somerville.....	3	2
Chicago.....	73	24	Springfield.....	3	1
Cairo.....	2	1	Worcester.....	8	6
Danville.....		1	Michigan:		
Decatur.....		1	Ann Arbor.....		1
East St. Louis.....		1	Detroit.....	23	12
Freeport.....		1	Flint.....		1
Jacksonville.....		1	Hamtramck.....	1	
Oak Park.....	1		Highland Park.....	1	
Peoria.....		1	Muskegon.....		1
Springfield.....	1		Pontiac.....	3	
Indiana:			Port Huron.....	3	
East Chicago.....		1	Minnesota:		
Elkhart.....		2	Minneapolis.....		1
Gary.....		1	St. Paul.....		1
Indianapolis.....		4	Missouri:		
Kokomo.....		1	Independence.....		1
Mishawaka.....		1	Kansas City.....		6
South Bend.....		1	Nevada:		
Terre Haute.....		2	Reno.....	1	
Iowa:			New Hampshire:		
Burlington.....	1		Manchester.....		1

CITY REPORTS FOR WEEK ENDED JUNE 18, 1921—Continued.

PNEUMONIA (ALL FORMS)—Continued.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
New Jersey:			Ohio:		
Bloomfield.....	1	1	Akron.....	2	1
Elizabeth.....	1	1	Canton.....	1	1
Garfield.....	2	1	Cincinnati.....	6	6
Irvington.....	1	1	Cleveland.....	6	3
Jersey City.....	1	1	Columbus.....	1	1
Kearny.....	1	1	Kenmore.....	1	1
Orange.....	5	5	Lorain.....	1	1
Passaic.....	1	5	Toledo.....	1	2
Paterson.....	1	1	Youngstown.....	1	1
Trenton.....	3	2	Oregon:		
New Mexico:			Portland.....	2	2
Albuquerque.....	1	1	Pennsylvania:		
New York:			Philadelphia.....	54	33
Albany.....	5	1	Rhode Island:		
Binghamton.....	4	1	Providence.....	4	4
Buffalo.....	12	1	South Carolina:		
Elmira.....	5	1	Charleston.....	3	3
Ithaca.....	1	1	Tennessee:		
Lackawanna.....	1	1	Nashville.....	1	1
Lockport.....	1	1	Texas:		
Middletown.....	1	1	Austin.....	1	1
Mount Vernon.....	1	1	Beaumont.....	1	1
New York.....	196	55	El Paso.....	5	5
Niagara Falls.....	2	1	Utah:		
Port Chester.....	1	1	Salt Lake City.....	1	1
Rochester.....	4	3	Vermont:		
Rome.....	4	3	Rutland.....	1	1
Schenectady.....	5	2	Virginia:		
Syracuse.....	4	1	Danville.....	1	1
Troy.....	2	1	Norfolk.....	1	1
Watervliet.....	1	1	Portsmouth.....	1	1
Yonkers.....	7	2	Richmond.....	3	3
North Carolina:			Roanoke.....	1	1
Charlotte.....	1	1	West Virginia:		
Winston-Salem.....	1	1	Huntington.....	2	2
			Wheeling.....	1	1

POLIOMYELITIS (INFANTILE PARALYSIS).

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1920, inclusive. In instances in which data for the full six years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended June 18, 1921.		City.	Median for previous years.	Week ended June 18, 1921.	
		Cases.	Deaths.			Cases.	Deaths.
California:				Massachusetts:			
Berkeley.....	0	1	1	Newton.....	0	1	1
San Francisco.....	0	1	1	Michigan:			
Illinois:				Saginaw.....	0	1	1
Aurora.....	1	1	1	Minnesota:			
Chicago.....	1	1	1	Minneapolis.....	0	1	1
East St. Louis.....	0	1	1	New York:			
Maryland:				New York.....	2	1	1
Baltimore.....	0	1	1				

RABIES IN ANIMALS.

City.	Cases.
Illinois:	
East St. Louis.....	1
Missouri:	
Kansas City.....	2
North Carolina:	
Winston-Salem.....	1

CITY REPORTS FOR WEEK ENDED JUNE 18, 1921—Continued.

ROCKY MOUNTAIN SPOTTED OR TICK FEVER.

City.	Cases.	Deaths.
Montana:		
Missoula.....	1	1

SCARLET FEVER.

See p. 1578; also Telegraphic weekly reports from States, p. 1568, and Monthly summaries by States, p. 1571.

SMALLPOX.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1920, inclusive. In instances in which data for the full six years are incomplete, the median is that for the number of years for which information is available.

City.	Median for pre- vious years.	Week ended June 18, 1921.		City.	Median for pre- vious years.	Week ended June 18, 1921.	
		Cases.	Deaths.			Cases.	Deaths.
Alabama:				Missouri:			
Birmingham.....	2	12		Kansas City.....	10	9	
Mobile.....	1	8		St. Louis.....	4	4	
Montgomery.....	0	2		Nebraska:			
Tuscaloosa.....	0	1		Lincoln.....	4	1	
California:				Omaha.....	9	2	
Berkeley.....	0	2		New Jersey:			
Los Angeles.....	1	1		Atlantic City.....	0	1	
Oakland.....	0	2		New York:			
Riverside.....	1	13		Mount Vernon.....		1	
Sacramento.....	0	1		North Carolina:			
San Francisco.....	0	4		Charlotte.....	0	1	
Colorado:				Winston-Salem.....	1	1	
Denver.....	15	24		North Dakota:			
Pueblo.....	0	4		Fargo.....	0	3	
Georgia:				Grand Forks.....		2	
Atlanta.....	10	4		Ohio:			
Illinois:				Cincinnati.....	1	3	
Chicago.....	1	9		Columbus.....	0	2	
East St. Louis.....	1	1		Kenmore.....		1	
Pekin.....	1	1		Lancaster.....	0	4	
Peoria.....	1	1		Marion.....	2	1	
Indiana:				Newark.....	0	13	
Elkhart.....	0	4		Youngstown.....	3	1	
Fort Wayne.....	1	2		Zanesville.....	0	2	
Gary.....	3	1		Oklahoma:			
Marion.....	2	2		Oklahoma City.....	5	6	
South Bend.....	0	5		Tulsa.....	2	3	
Iowa:				Oregon:			
Burlington.....	0	1		Portland.....	5	9	
Clinton.....	0	4		South Carolina:			
Council Bluffs.....	2	1		Charleston.....	0	2	
Des Moines.....	3	3		Columbia.....	0	1	
Mason City.....	0	1		Spartanburg.....	1	2	
Muscatine.....	0	1		Tennessee:			
Ottumwa.....		2		Chattanooga.....	0	4	
Sioux City.....	3	4		Knoxville.....	3	7	
Kansas:				Texas:			
Atchison.....	4	3		Beaumont.....	0	1	
Coffeyville.....	0	1		Galveston.....	0	3	
Fort Scott.....	1	2		Utah:			
Hutchinson.....	1	4		Salt Lake City.....	5	0	
Kansas City.....	2	5		Virginia:			
Salina.....		1		Norfolk.....	0	1	
Topeka.....	2	3		Washington:			
Wichita.....	8	8		Bellingham.....	2	1	
Louisiana:				Seattle.....	4	8	
Alexandria.....	0	1		Spokane.....	6	8	
New Orleans.....	3	6	1	Tacoma.....	3	5	
Michigan:				Vancouver.....	0	3	
Detroit.....	6	13		West Virginia:			
Highland Park.....	1	2		Bluefield.....	3	1	
Ishpeming.....	0	2		Fairmont.....	0	1	
Muskegon.....		4		Wisconsin:			
Pontiac.....	3	2		Madison.....	1	2	
Minnesota:				Marquette.....	0	1	
Duluth.....	3	8		Milwaukee.....	6	5	
Minneapolis.....	24	12		Oshkosh.....	3	1	
St. Cloud.....	1	3		Racine.....	0	1	
St. Paul.....	5	18		Superior.....	1	1	

CITY REPORTS FOR WEEK ENDED JUNE 18, 1921—Continued.

TETANUS.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Indiana:			South Carolina:		
Terre Haute.....		1	Charleston.....		1
Louisiana:			Tennessee:		
New Orleans.....	1	1	Knoxville.....	2	2
New York:			Texas:		
Yonkers.....	1	1	Galveston.....		1
North Carolina:			Virginia:		
Wilmington.....		1	Portsmouth.....		1
Ohio:					
Newark.....		1			

TUBERCULOSIS.

See p. 1578; also Telegraphic weekly reports from States, p. 1568.

TYPHOID FEVER.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1920, inclusive. In instances in which data for the full six years are incomplete, the median is that for the number of years for which information is available.

City.	Median for pre- vious years.	Week ended June 18, 1921.		City.	Median for pre- vious years.	Week ended June 18, 1921.	
		Cases.	Deaths.			Cases.	Deaths.
Alabama:				Missouri:			
Anniston.....	0	1		Joplin.....	3	1	
Birmingham.....	6	2		Kansas City.....	2	1	
Mobile.....	0		1	St. Louis.....	4	2	1
Tuscaloosa.....	0	1		Montana:			
Arkansas:				Great Falls.....	1	4	
Little Rock.....	0	2		Nebraska:			
North Little Rock.....	0	2		Omaha.....	0	1	
California:				New Hampshire:			
Los Angeles.....	2	2	1	Keene.....	0	1	
Oakland.....	1	1		New Jersey:			
Sacramento.....	0	2	1	Montclair.....	0	1	
San Diego.....	1	1		Pasaic.....	0	1	
San Francisco.....	1	4	1	New York:			
Connecticut:				Albany.....	0	1	
Waterbury.....	0	1		Binghamton.....	0	1	
District of Columbia:				Jamestown.....	0		1
Washington.....	4	3	1	New York.....	23	4	1
Georgia:				Niagara Falls.....	0	3	
Atlanta.....	2	6	3	North Tonawanda.....	0	1	
La Grange.....		3		Schenectady.....	1	1	
Valdosta.....		1		North Carolina:			
Illinois:				Durham.....	0	9	
Alton.....	0	1		Winston-Salem.....	2	2	
Chicago.....	5	4	1	Ohio:			
Indiana:				Cincinnati.....	1	1	
Indianapolis.....	2	3		Cleveland.....	3	8	
Kansas:				Fremont.....	0	1	
Kansas City.....	0	3		Springfield.....	0	1	
Leavenworth.....	0	1		Toledo.....	2	1	
Topeka.....	0	1		Oklahoma:			
Kentucky:				Tulsa.....	0	2	
Louisville.....	1	1		Pennsylvania:			
Paducah.....	0	1		Philadelphia.....	10	5	2
Louisiana:				South Carolina:			
Alexandria.....	0	1		Charleston.....	6	2	
New Orleans.....	5	2		Columbia.....	1	1	
Maine:				Tennessee:			
Bangor.....	1	1		Nashville.....	4	3	
Maryland:				Texas:			
Baltimore.....	5	4	2	Beaumont.....	0	1	
Cumberland.....	0		1	Dallas.....	1	1	
Massachusetts:				Waco.....	2		1
Boston.....	3	1		Virginia:			
Fall River.....	2	3		Alexandria.....	0	8	
Lawrence.....	0	1		Portsmouth.....	1	1	
Waltham.....	0	1		Washington:			
Worcester.....	0	1	1	Seattle.....	0	1	
Michigan:	2	2		West Virginia:			
Detroit.....	5	5	3	Charleston.....	1	2	
Minnesota:							
St. Paul.....	0	1					

CITY REPORTS FOR WEEK ENDED JUNE 18, 1921—Continued.

TYPHUS FEVER.

City.	Cases.	Deaths.
New York:		
New York.....	1	

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

City.	Population January 1, 1920, subject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Alabama:										
Anniston.....	17,734								3	
Birmingham.....	178,270	55	1		20	1	1		7	7
Mobile.....	60,151	18	1							
Montgomery.....	43,464	12								
Tuscaloosa.....	11,996						1		1	
Arizona:										
Tucson.....	20,292	11								2
Arkansas:										
Fort Smith.....	28,811		1		1		2			
Little Rock.....	64,997				7		1		12	
North Little Rock.....	14,048				21		1		1	
California:										
Alameda.....	28,800	4			1					
Berkeley.....	55,886	7	1		2					
Eureka.....	12,923	2					1		1	
Long Beach.....	55,593	16	1				1			1
Los Angeles.....	576,673	168	61	1	29		16	1	68	22
Oakland.....	216,361	50	4		1		4		3	5
Pasadena.....	45,354	19	1		3					
Richmond.....	16,843	1								
Riverside.....	19,341	6					2		1	1
Sacramento.....	65,857	10	4						1	1
San Diego.....	74,683	24	1		74		4		4	4
San Francisco.....	598,410	117	23	6	25		9		33	10
Santa Barbara.....	19,441	3								1
Santa Cruz.....	10,917	5								
Stockton.....	40,296	9			1		3			2
Colorado:										
Colorado Springs.....	30,105	11							12	5
Denver.....	296,369	52	16	1	11		3			12
Pueblo.....	42,908	20	10	1	3		2			2
Trinidad.....	10,906		1		1					
Connecticut:										
Bridgeport.....	143,538	32	11		3		8	3	2	1
Bristol.....	20,620	1	1						1	
Derby.....	11,238	1	2				1			
Fairfield (town).....	11,475		1							
Hartford.....	138,036	33	1		10		4	3	3	2
Manchester (town).....	18,370	4							1	
Moriden (city).....	29,842		1							
Milford (town).....	10,193		1		1		1			
New Haven.....	162,799	26	6		1		1		17	3
New London.....	25,688	4			1					
Norwalk.....	27,700	3	2				1			
Stonington.....	10,236	0								
Waterbury.....	91,410	13	2		8				5	1
Delaware:										
Wilmington.....	110,168	28					16			2
District of Columbia:										
Washington.....	437,571	103	8		99		12		18	9
Georgia:										
Atlanta.....	200,616	76			8		6		1	8
Brunswick.....	14,413	1								
Macon.....	52,995	20	1		2					1
Savannah.....	83,252	28							2	4
Valdosta.....	10,783	1								
Idaho:										
Boise.....	21,393	7	1		4		6			
Illinois:										
Alton.....	24,682	8			1					
Aurora.....	38,397	13	1		2		1			
Bloomington.....	28,725	10							4	

CITY REPORTS FOR WEEK ENDED JUNE 18, 1921—Continued.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City.	Popula- tion Janu- ary 1, 1920, subject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Illinois—Continued.										
Blue Island.....	11,424	6	3				2			
Centralia.....	12,491	3	1							
Chicago.....	2,701,705	523	155	7	254	2	70	6	231	
Cicero.....	44,995	9	1							2
Danville.....	33,750	12					2			
Decatur.....	43,818	6	1		1		7			
East St. Louis.....	66,740	12	6	2	1					
Elgin.....	27,454	2			1					
Evanston.....	37,215	10	2		4		3			
Forest Park.....	10,768	1	3							
Freeport.....	19,669	10	2							
Galesburg.....	23,834	6			1					1
Jacksonville.....	15,713	9								2
Kewanee.....	16,026	5	1	2	1		1			
La Salle.....	13,050	0					1			
Mattoon.....	13,552	2					3			
Oak Park.....	39,830	15	3	1	14		2		1	
Pekin.....	12,086		1		1		4			
Peoria.....	76,121	16	2				2			
Rockford.....	65,651	15	1		5		1			2
Rock Island.....	35,177	5	1		1					1
Springfield.....	59,183	15			3		4			
Indiana:										
Bloomington.....	11,595	2								1
East Chicago.....	35,967	7								
Elkhart.....	24,277	12								
Fort Wayne.....	36,549	15	10		6					
Frankfort.....	11,585	2					2			
Gary.....	55,378	11			1		1			
Hammond.....	36,004	6	1				1			
Huntington.....	14,000	2	1							
Indianapolis.....	314,194	64		1			2	1	25	4
Kokomo.....	30,067	7								
La Fayette.....	22,496	7								1
Logansport.....	21,626	3					2			
Marion.....	23,747	5	2							
Mishawaka.....	15,105	3					1			
Muncie.....	36,624	6			3					
Richmond.....	26,765	16								
South Bend.....	70,983	14			1				3	1
Terre Haute.....	66,083	12	5				1		1	
Iowa:										
Cedar Rapids.....	45,566		1				2			
Council Bluffs.....	36,162	7	1				1			
Davenport.....	56,727		1				6			
Des Moines.....	126,468						4			
Dubuque.....	39,141		1							
Mason City.....	20,065						2			
Muscatine.....	16,068	3			1					
Kansas:										
Atchison.....	12,630				6		1		2	
Coffeyville.....	13,452	6								
Fort Scott.....	10,698	3	3							
Hutchinson.....	23,298		1		2				1	
Kansas City.....	101,177		2		3		1		3	
Lawrence.....	12,456	4								
Leavenworth.....	16,912		1		2					
Parsons.....	16,028	4	2							
Salina.....	15,085	3	1							
Topeka.....	50,022	11	1				5		4	
Wichita.....	72,128	19	6	1	20		1		1	
Kentucky:										
Covington.....	57,121	16							1	2
Lexington.....	41,534	9			1					
Louisville.....	231,891	61	3		20		7		4	6
Louisiana:										
Alexandria.....	17,510	3								
Lake Charles.....	13,088	4								
Monroe.....	12,675	7								
New Orleans.....	387,219	126	6						12	18
Maine:										
Auburn.....	16,985	2					1			
Bangor.....	27,978		2						1	

CITY REPORTS FOR WEEK ENDED JUNE 18, 1921—Continued.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City.	Popula- tion Janu- ary 1, 1920, subject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Maine—Continued.										
Bath.....	14,731	7					3			
Biddeford.....	18,008	4								
Lewiston.....	31,791	8		3	1		8			1
Portland.....	69,272	28	3		3		1			1
Sanford.....	10,691	4					1			1
Waterville.....	13,251				2					
Maryland:										
Baltimore.....	733,836	213	20	1	68	2	19		21	13
Cumberland.....	29,837	10					3			
Massachusetts:										
Adams.....	12,967	4								2
Arlington.....	18,665	3			7		1			
Attleboro.....	19,731	9					4		1	2
Belmont.....	10,749	2	1		1					
Beverly.....	22,561	2			2					
Boston.....	748,060	161	44	1	77	1	33	3	32	13
Braintree.....	10,580	4					4			1
Brockton.....	66,138	13	2		1		2		1	
Brookline.....	57,748	4	2				1		2	1
Cambridge.....	109,691	19	8		20		1		5	3
Chelsea.....	43,194	7			3		1		3	
Chicopee.....	36,214	7					1			1
Clinton.....	12,979	0			1					
Dedham.....	10,792	4								1
Easthampton.....	11,261		1							
Everett.....	40,120	2			3		2			
Fall River.....	120,485	29	5		5		3		2	
Gardner.....	16,971	5								
Greenfield.....	15,462	2							1	
Haverhill.....	53,884	10	2		2		6		6	
Holyoke.....	60,203	12			1				2	3
Lawrence.....	94,270	17			2		3			
Leominster.....	19,744	2			1		2		2	
Lowell.....	112,479	24	6		1		1		4	1
Lynn.....	99,148	19	6		32				1	2
Medford.....	39,038	3	3		7		4			
Melrose.....	18,204	3								1
Methuen.....	15,189	5					1			
New Bedford.....	121,217	31	3	2			3		3	2
Newburyport.....	15,618	5			1				1	
Newton.....	46,054	9	1				2		3	
North Adams.....	23,282	5								
Northampton.....	21,951	9	1							
Norwood.....	12,627	0							2	
Peabody.....	19,552	2	1						1	
Pittsfield.....	41,751	9	1						1	1
Plymouth.....	13,045	2								
Quincy.....	47,876	9	2		32		1		1	1
Salem.....	42,529	7			1		2		2	1
Somerville.....	93,091	16	2	1	6		4		5	1
Southbridge.....	11,245	3								
Springfield.....	129,563	21	3	1	1		7		3	1
Taunton.....	57,137	16	1		1		1			
Wakefield.....	15,025	2			4					
Waltham.....	30,915	6	2		1					
Watertown.....	21,457	2								
West Springfield.....	13,443	3			11					
Westfield.....	18,604	4			1					1
Woburn.....	16,574	4								
Worcester.....	179,754	2			16	2	2		9	3
Michigan:										
Alpena.....	11,101		3	1						
Ann Arbor.....	19,516	9			1		1		1	
Battle Creek.....	36,164		7				1			
Benton Harbor.....	12,233									
Detroit.....	992,730	178	83	5	52	1	40	4	56	23
Flint.....	91,599	21	2		2		2			1
Grand Rapids.....	137,634	23	9		1		1		4	
Hamtramck.....	48,615	4	1		3		4		4	
Highland Park.....	46,499	8			6		6			
Ishpeming.....	10,500	1	2	1					1	
Marquette.....	12,718	3								
Muskegon.....	36,570	18	1						2	1
Pontiac.....	34,273	10	11				4			

CITY REPORTS FOR WEEK ENDED JUNE 18, 1921—Continued.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City.	Popula- tion Janu- ary 1, 1920, subject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Michigan—Continued.										
Port Huron.....	25,944	6	2							
Saginaw.....	61,903	16	1		1		1		4	2
Sault Ste. Marie.....	12,066	5					3			
Minnesota:										
Austin.....	10,118	3								
Duluth.....	98,917	12	1		12		4		7	1
Hibbing.....	15,089				1					
Minneapolis.....	380,582	68	9	2	17	1	21		19	10
Rochester.....	13,722	13			9					
St. Cloud.....	15,873		5							
St. Paul.....	234,595	49	7		3		14	1	16	4
Missouri:										
Cape Girardeau.....	10,252	4								1
Independence.....	11,686	11								
Jefferson City.....	14,490	2								
Joplin.....	29,855				1					1
Kansas City.....	324,410	82	12		16		2		7	7
Saint Louis.....	772,897	181	39	2	2		26		51	10
Springfield.....	39,631	12								3
Montana:										
Billings.....	15,100	6							3	
Butte.....	41,611	14	1						12	1
Great Falls.....	24,121	4			2		1			
Missoula.....	12,668	7	1						1	1
Nebraska:										
Lincoln.....	54,934	11			1		2		1	3
Omaha.....	191,601	31	6	1	5		3			2
Nevada:										
Reno.....	12,016	2								
New Hampshire:										
Berlin.....	16,104	5								
Concord.....	22,167	8			2		1			
Dover.....	13,029	5								
Keene.....	11,210	3			2				1	
Manchester.....	78,334	15	6							
New Jersey:										
Asbury Park.....	12,400	4					1			
Atlantic City.....	50,682	9	4		5		7		5	
Bayonne.....	76,754		2				4		2	
Belleville.....	15,660						1			
Bloomfield.....	22,019	2			1		2			
Clifton.....	26,470	1	1		5		2		1	
Elizabeth.....	95,682		9		16	1	7		1	
Englewood.....	11,627	4	2							
Garfield.....	19,381	2				1	1			
Hackensack.....	17,667	5					2			
Harrison.....	15,721				1		1			
Hoboken.....	68,166	15	3		1		3			1
Irvington.....	25,480						1			
Jersey City.....	297,864		22		18		15		2	
Kearny.....	26,724	4			4		2			3
Montclair.....	28,810	3	2						1	
Morristown.....	12,548			1						
New Brunswick.....	32,779	8					2			
Orange.....	33,268		3						2	
Passaic.....	63,824	5			26		5			1
Paterson.....	135,866	18	4		5		3		1	
Perth Amboy.....	41,707		7		5		5			
Phillipsburg.....	16,923	18			1		1		1	1
Plainfield.....	27,700	10	2				5			3
Rahway.....	11,942	4	1						1	
Trenton.....	119,289	28	2		19		3		2	3
Union.....	20,651		1		1					
West Hoboken.....	40,068	5					1	1		
West New York.....	29,926	2	2	1			1		1	
West Orange.....	15,573	3	1		8		1			
New Mexico:										
Albuquerque.....	15,157	11			2				5	2
New York:										
Albany.....	113,344		7		10				4	
Binghamton.....	66,800	15	7	1			3		2	3
Buffalo.....	506,775	64	53	1	41		32	3	31	8

CITY REPORTS FOR WEEK ENDED JUNE 18, 1921—Continued.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City.	Population January 1, 1920, subject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
New York—Continued.										
Cohoes.....	22,987	7	—	—	—	—	—	—	—	1
Elmira.....	45,305	3	—	—	3	—	1	—	—	—
Geneva.....	14,648	2	—	—	—	—	—	—	—	—
Glens Falls.....	16,638	4	1	—	—	—	—	—	—	—
Ithaca.....	17,004	1	—	—	—	—	2	—	—	—
Jamestown.....	38,917	14	9	1	67	—	1	—	—	2
Lackawanna.....	17,918	1	1	—	—	—	1	—	1	—
Lockport.....	21,308	4	4	—	—	—	—	—	—	1
Middletown.....	18,420	—	—	—	4	—	3	—	—	—
Mount Vernon.....	42,726	4	5	—	2	—	1	—	—	—
Newburgh.....	30,366	10	3	—	—	—	—	—	—	1
New York.....	5,021,151	1,128	311	9	220	10	211	12	220	197
Niagara Falls.....	50,760	6	2	—	—	—	8	—	1	1
North Tonawanda.....	15,482	3	1	—	2	—	—	—	—	—
Olean.....	20,506	10	2	—	1	—	2	1	—	—
Peekskill.....	15,868	2	2	—	2	—	—	—	—	—
Plattsburg.....	10,909	5	—	—	—	—	1	—	—	—
Port Chester.....	16,573	3	1	—	10	—	1	—	—	4
Rochester.....	205,750	50	33	1	5	—	13	—	6	4
Rome.....	26,341	—	1	—	1	—	1	—	—	—
Saratoga Springs.....	13,181	5	—	—	—	—	—	—	—	1
Schenectady.....	88,723	15	4	1	14	—	—	—	1	1
Syracuse.....	171,717	35	7	—	29	—	6	—	3	—
Troy.....	72,013	17	1	—	—	—	1	—	1	1
Watervliet.....	16,073	2	—	—	—	—	1	—	—	—
White Plains.....	21,031	4	—	—	—	—	1	—	—	—
Yonkers.....	100,226	22	4	—	4	—	3	—	—	5
North Carolina:										
Charlotte.....	46,338	12	—	—	2	—	—	—	6	—
Durham.....	21,719	5	—	—	—	—	—	—	—	1
Raleigh.....	24,418	13	—	—	1	—	1	—	1	2
Rocky Mount.....	12,742	5	—	—	—	—	—	—	—	—
Salisbury.....	13,884	3	—	—	—	—	—	—	—	—
Wilmington.....	33,372	11	—	—	—	—	—	—	1	—
Winston-Salem.....	48,395	14	—	—	2	—	2	—	5	1
North Dakota:										
Fargo.....	21,961	—	4	1	2	—	4	—	—	—
Ohio:										
Akron.....	208,435	37	4	—	4	—	5	—	10	—
Barberton.....	18,811	0	—	—	—	—	—	—	—	—
Bucyrus.....	10,425	6	2	—	1	—	—	—	—	—
Canton.....	87,091	16	5	—	—	—	5	1	—	1
Chillicothe.....	15,831	3	—	—	—	—	—	—	—	—
Cincinnati.....	401,247	106	13	1	12	—	3	1	23	14
Cleveland.....	796,836	—	15	1	50	—	30	—	—	—
Cleveland Heights.....	15,236	—	—	—	—	—	—	—	—	2
Columbus.....	237,031	45	10	—	—	—	7	—	3	4
Cuyahoga Falls.....	10,200	—	—	—	—	—	1	—	—	—
Dayton.....	152,550	23	1	—	—	—	2	—	1	—
East Cleveland.....	27,292	3	1	—	—	—	—	—	1	1
Elyria.....	20,474	7	1	—	—	—	—	—	1	—
Findlay.....	17,021	3	—	—	—	—	—	—	—	—
Hamilton.....	30,675	13	—	—	—	—	1	—	—	—
Ironton.....	14,007	2	—	—	—	—	1	—	—	—
Kenmore.....	12,683	—	1	—	1	—	—	—	1	—
Lancaster.....	14,706	6	—	—	—	—	—	—	—	—
Lorain.....	37,295	—	1	—	17	—	—	—	1	—
Mansfield.....	27,824	1	—	—	1	—	1	—	1	—
Middletown.....	23,594	3	1	—	—	—	—	—	—	—
Newark.....	26,718	6	—	—	—	—	—	—	—	—
New Philadelphia.....	10,718	—	1	—	—	—	—	—	1	—
Niles.....	13,080	3	—	—	—	—	4	3	—	—
Piqua.....	15,044	3	—	—	—	—	—	—	—	—
Salem.....	10,305	2	—	—	—	—	—	—	—	—
Sandusky.....	22,897	3	—	—	—	—	—	—	—	—
Springfield.....	60,840	15	5	—	2	—	5	—	0	2
Steubenville.....	28,308	3	—	—	—	—	—	—	—	—
Toledo.....	243,109	53	10	—	2	—	7	—	—	5
Youngstown.....	132,358	15	—	—	16	—	2	—	2	1
Zanesville.....	29,569	9	—	—	—	—	—	—	—	—
Oklahoma:										
Oklahoma City.....	91,258	12	1	1	2	—	2	—	1	1

*Pulmonary tuberculosis only.

CITY REPORTS FOR WEEK ENDED JUNE 18, 1921—Continued.

DIPHtheria, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City.	Popula- tion Janu- ary 1, 1920, subject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Oregon:										
Portland.....	258,288	50	14		17		1		11	1
Pennsylvania:										
Philadelphia.....	1,823,158	469	91	8	34	1	119	5	88	40
Rhode Island:										
Cranston.....	29,407	6			3		1		1	
East Providence (town).....	21,793		1		4		3			
Newport.....	30,255	4	1				6			1
Providence.....	237,595	62	3		11		5	1		5
South Carolina:										
Charleston.....	67,957	83							2	26
Columbia.....	37,524				9				3	
Spartanburg.....	22,638	7	1		11					
Tennessee:										
Chattanooga.....	57,895				1					
Knoxville.....	77,818				2				3	3
Nashville.....	118,742	34	1		10		3		3	
Texas:										
Austin.....	34,876	7	4				1			1
Beaumont.....	40,422	12		1	1				1	1
Corpus Christi.....	10,522	3							1	
Dallas.....	158,976	42	1		21		1		6	1
El Paso.....	77,543	52			2		2			14
Galveston.....	44,255	9								
Waco.....	38,500	11								2
Utah:										
Salt Lake City.....	118,110	27	5		2		2		1	1
Vermont:										
Barre.....	19,008				3		2			
Burlington.....	22,779	3			1		1			
Rutland.....	11,954	6	1							
Virginia:										
Alexandria.....	18,060	1							1	
Danville.....	21,539	7			1				2	
Lynchburg.....	29,956	6	2		47		2		2	
Norfolk.....	115,777				4		2		6	
Petersburg.....	31,002	7			8		1		2	1
Portsmouth.....	54,387	10	1							
Richmond.....	171,667	62	6		27		1		7	8
Roanoke.....	50,842	19			9					1
Washington:										
Everett.....	27,641		1		9					
Seattle.....	315,652		6		5		3			
Spokane.....	104,437		2		7		3			
Tacoma.....	96,965		2		4					
Vancouver.....	12,637				2					
Walla Walla.....	15,503						1			
Yakima.....	18,539				3					
West Virginia:										
Charleston.....	39,608	22								
Fairmont.....	17,831	1								
Huntington.....	50,177	21			2	1	1			5
Martinsburg.....	12,515				1					
Moundsville.....	10,669		3							
Parkersburg.....	20,030	3								
Wheeling.....	54,322	10	4		1		2			1
Wisconsin:										
Appleton.....	19,561		1				1			
Ashland.....	11,234						1			
Beloit.....	21,284	4								1
Fond du Lac.....	23,427		1							
Green Bay.....	31,017	5	4		4					
Janesville.....	18,293	2	1							
Kenosha.....	40,472	4			2					1
Madison.....	38,372	11			2					
Marinette.....	13,610				1					
Milwaukee.....	457,147		23		14		6		11	
Oshkosh.....	33,162	8	2				1			1
Racine.....	58,593	7			2		9	1		
Sheboygan.....	30,955		1							
Superior.....	39,624	6					3		1	

FOREIGN AND INSULAR.

PLAGUE ON VESSEL.

Steamship "Oreland"—At Genoa, Italy.

The steamship *Oreland* from La Plata, Argentina, arrived at Genoa, Italy, June 12, 1921, with a history of two fatal cases of plague occurring on board during the voyage. The cases occurred among the crew of the vessel. The *Oreland* left La Plata May 13, 1921, with a cargo of wheat for Genoa, via St. Vincent, Cape Verde Islands.

CUBA.

Communicable Diseases—Habana.

Communicable diseases have been notified at Habana as follows:

Disease.	June 11-20, 1921.		Remain- ing under treatment June 20, 1921.	Disease.	June 11-20, 1921.		Remain- ing under treatment June 20, 1921.
	New cases.	Deaths.			New cases.	Deaths.	
Chicken pox.....	4	.....	5	Measles.....	6	.....	3
Diphtheria.....	1	.....	1	Scarlet fever.....	2	.....	2
Leprosy.....	.....	.....	11	Smallpox.....	4	1	5
Malaria.....	23	1	25	Typhoid fever.....	9	1	27

¹ From the interior, 13.

² From the interior, 16.

Disembarkation of Emigrants Arriving Under Contract.

By order of the Cuban quarantine service, dated June 21, 1921, disembarkation of emigrants arriving under contract may be made only at the ports of Habana and Santiago and, in case of there being no quarantinable disease on board, at the ports of Antilla and Cienfuegos, Cuba.

Quarantine Against Honduras Removed.¹

Under date of June 3, 1921, quarantine on account of yellow fever was removed at ports in Cuba against arrivals from Honduras.

JAMAICA.

Infectious Disease (Alastrim or Kaffir Pox).

During the two weeks ended June 11, 1921, 224 new cases of alastrim or Kaffir pox were reported in the Island of Jamaica.

¹ Public Health Reports, Mar. 18, 1921, p. 738.

MEXICO.

Plague—Tampico.¹

During the 10-day period ended June 20, 1921, 26 cases of plague were reported at Tampico, Mexico, the last cases being reported June 18, 1921. The total number of cases reported at Tampico from January 1 to June 18, 1921, was 145.

Yellow Fever—Vera Cruz.

According to information dated June 27, 1921, 7 cases of yellow fever had occurred in Vera Cruz, Mexico, during the preceding 15 days, 5 cases being officially reported on June 27.

PERU.

Plague—March-April, 1921.

During the month of March, 1921, 76 cases of plague with 44 deaths were reported in Peru. The cases and deaths were distributed in the maritime departments of the country as follows: *Arequipa*, 2 cases occurring at Mollendo; *Callao*, 7 cases with 1 death at Callao; *Lambayeque*, 2 cases with 1 death at Chiclayo; *Libertad*, 12 cases with 7 deaths in 5 localities; *Lima*, 32 cases with 16 deaths, of which 20 cases with 13 deaths occurred in Lima city and 7 cases with 2 deaths in the Lima district; *Piura*, 21 cases with 19 deaths occurring at Payta, Piura, and Sullana.

During the month of April, 1921, 43 cases of plague with 20 deaths were reported in the maritime departments of Peru as follows: *Ancachs*, 4 cases with 1 death at Huarmey; *Arequipa*, 3 cases with 3 deaths at Mollendo; *Callao*, 8 cases at Callao; *Lambayeque*, 1 case with 1 death at Chiclayo; *Libertad*, 16 cases with 5 deaths occurring in 5 localities; *Lima*, 6 cases with 3 deaths, including 3 cases with 2 deaths at Lima city; *Piura*, 7 deaths occurring at Payta, Sullana, and Talara.

Yellow Fever—March-April, 1921.

During the month of March, 1921, 66 cases of yellow fever with 25 deaths were reported in the Department of Lambayeque. The cases were distributed in 8 localities.

During the month of April, 1921, 106 cases of yellow fever with 32 deaths were reported from 13 localities.

¹ Reports of the occurrence of plague in Tampico published in the Public Health Reports for June 10, 1921, p. 1354, and June 24, p. 1481, recorded as of 10-day periods ended June 6 and 17, respectively, were for 10-day periods ended May 31 and June 10, respectively.

POLAND.**Smallpox—Typhus Fever—March–April, 1921.**

During the period from March 1 to April 30, 1921, 1,117 cases of smallpox with 142 deaths, and 11,489 cases of typhus fever with 1,131 deaths were reported in Poland. The occurrence was distributed in 11 districts. In the city of Warsaw 90 cases of smallpox with 13 deaths, and 223 cases of typhus fever with 29 deaths were reported.

PORTO RICO.**Examination of Rats.**

During the week ended June 11, 1921, 3,199 rats were examined in Porto Rico for plague infection. Of these, 929 rats were taken in San Juan and vicinity. No plague infection was found.

Plague.

During the week ended June 11, 1921, two fatal cases of human plague were reported in Porto Rico, one case occurring at Caguas and one at Manati, making a total of 24 cases reported from the beginning of the outbreak.

UNION OF SOUTH AFRICA.**Typhus Fever—Outbreak, Vicinity of Cape Town.**

During the week ended May 19, 1921, 10 cases of typhus fever with three deaths were reported in the vicinity of Cape Town, Union of South Africa. The outbreak occurred in a cantonment of natives and was attributed to overcrowding.

VIRGIN ISLANDS.**Contagious Diseases—May, 1921.**

The occurrence of contagious diseases in the Virgin Islands during the month of May, 1921, has been reported as follows:

Disease.	Cases.	Remarks.
In St. Thomas and St. John:		
Chancroid.....	3	2 imported.
Gonorrhea.....	8	4 imported.
Malaria.....	1	1 imported.
Mumps.....	26	
In St. Croix:		
Chancroid.....	2	
Filariasis.....	4	Bancrofti.
Gonorrhea.....	5	
Measles.....	9	
Mumps.....	2	
Syphilis.....	2	
Trachoma.....	3	

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.Reports Received During Week Ended July 8, 1921.¹**CHOLERA.**

Place.	Date.	Cases.	Deaths.	Remarks.
India.....				Mar. 6-12, 1921: Deaths, 1,902.
Bombay.....	May 1-7.....	1	1	
Calcutta.....	May 8-14.....	75	66	
Madras.....	May 15-21.....	1		
Rangoon.....	Apr. 24-May 7....	11	9	

PLAGUE.

Ceylon:				
Colombo.....	May 8-14.....	1	1	
China:				
Manchuria—				
Harbin.....	May 3-16.....	40		
Egypt.....				Jan. 1-May 26, 1921: Cases, 132; deaths, 64.
Cities—				
Alexandria.....	May 21-27.....	1	1	
Suez.....	May 20-25.....	2	2	
Provinces—				
Assiout.....	May 24-25.....	7	5	
India.....				May 1-7, 1921: Cases, 494; deaths, 387.
Bombay.....	May 1-7.....	73	54	
Calcutta.....	May 8-21.....	7	7	
Karachi.....	do.....	8	7	
Rangoon.....	Apr. 24-May 7....	22	23	
Mexico:				
Tampico.....	June 11-20.....	26		Last case, June 18, 1921. Total from Jan. 1 to June 18, 1921: Cases, 145.
Peru.....				Mar. 1-31, 1921: Cases, 76; deaths, 44. Apr. 1-30, 1921: Cases, 43; deaths, 20.
Department—				
Arequipa.....	Mar. 1-31.....	2		At Mollendo.
Callao.....	do.....	7	1	At Callao.
Lambayeque.....	do.....	2	1	At Chiclayo.
Libertad.....	do.....	12	7	In 5 localities.
Lima.....	do.....	32	16	At Lima city, 20 cases, 13 deaths.
Piura.....	do.....	21	19	At Payta, Piura, and Sullana.
Ancachs.....	Apr. 1-30.....	4	1	At Huarmey.
Arequipa.....	do.....	3	3	At Mollendo.
Callao.....	do.....	8		At Callao.
Lambayeque.....	do.....	1	1	At Chiclayo.
Libertad.....	do.....	16	5	In 5 localities.
Lima.....	do.....	6	3	In Lima city, 3 cases, 2 deaths.
Piura.....	do.....	5	7	At Payta, Sullana, and Talara.
On vessel:				
S. S. Orelana.....				At Genoa, Italy, June 12, 1921; from La Plata, Argentina. Two fatal cases plague in crew en route.

SMALLPOX.

Asia Minor:				
Smyrna.....	May 22-28.....	1		On the s. s. Nicholas.
Australia:				
Melbourne.....	Apr. 9-23.....	4	1	Mild epidemic.
Bolivia:				
La Paz.....	Apr. 1-30.....	5	4	
Brazil:				
Rio de Janeiro.....	May 8-14.....	1	1	
Bulgaria:				
Sofia.....	May 15-31.....	6		
Canada:				
Alberta—				
Calgary.....	May 26-June 18..	3		
British Columbia—				
Vancouver.....	May 28-June 11..	5		
Manitoba—				
Winnipeg.....	May 23-June 18..		5	

¹ From medical officers of the Public Health Service, American consuls, and other sources. For reports received from Jan. 1 to July 1, 1921, see Public Health Reports for July 1, 1921. The tables of epidemic diseases are terminated semiannually and new tables begun.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER— Continued.

Reports Received During Week Ended July 8, 1921—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Canada—Continued.				
New Brunswick—				
Westmoreland County.	June 5-11.....	1	.....
Nova Scotia—				
Sydney.....	.....do.....	1	.....
Ontario—				
Hamilton.....	June 12-18.....	3	.....
Kingston.....	June 5-11.....	1	.....	At two localities in vicinity, 2 cases.
London.....	.....do.....	1	.....
Montreal.....	June 12-18.....	1	.....
Ottawa.....	.....do.....	8	.....
Toronto.....	.....do.....	4	.....
Saskatchewan—				
Regina.....	June 5-11.....	2	.....
Saskatoon.....	June 7-13.....	2	.....
Chile:				
Antofagasta.....	May 16-29.....	91	46	
China:				
Amoy.....	May 8-14.....	.....	1	Present.
Canton.....	Apr. 1-30.....	.....	.....	Present.
Chungking.....	May 1-14.....	.....	.....	Present.
Foochow.....	May 8-11.....	.....	.....
Hankow.....	May 15-21.....	4	1	
Manchuria—				
Nankin.....	May 6-22.....	18	2	Present.
Tientsin.....	May 8-21.....	.....	.....	Mission hospital.
Tsingtau.....	May 8-11.....	1	.....
Colombia:				
Santa Marta.....	June 5-11.....	.....	.....	Present.
Cuba:				
Antilla.....	.....do.....	7	.....
Egypt:				
Cairo.....	Mar. 19-25.....	1	.....
Finland:				
Haiti:				
Cape Haitien.....	May 29-June 11...	142	.....
India:				
Bombay.....	May 1-7.....	32	20	
Calcutta.....	May 8-21.....	5	5	
Madras.....	.....do.....	11	4	
Rangoon.....	Apr. 21-May 7.....	10	2	
Japan:				
Kobe.....	May 24-30.....	1	.....
Java:				
West Java—				
Buitenzorg.....	Apr. 29-May 5....	10	2	
Krawang.....	.....do.....	2	.....
Lebak.....	.....do.....	3	1	
Mexico:				
Chihuahua.....	May 23-29.....	.....	1	
Mexico City.....	May 15-21.....	37	.....	Including Federal municipalities.
Panama:				
Colon.....	May 18-24.....	2	.....
Poland.....				Mar. 1-Apr. 30, 1921: Cases, 1,117; deaths, 142.
Bialystok.....	Mar. 1-Apr. 30....	3	.....
Cracovia.....	.....do.....	56	6	
Kielce.....	.....do.....	189	26	
Leopol.....	.....do.....	52	16	
Lodz.....	.....do.....	72	9	
Lublin.....	.....do.....	367	30	
Posen.....	.....do.....	26	2	
Silesia.....	.....do.....	10	.....	In Teschen.
Stanislavow.....	.....do.....	30	5	
Tarnopol.....	.....do.....	156	31	
Warsaw.....	.....do.....	36	4	
Warsaw city.....	.....do.....	10	13	
Spain:				
Tarragona.....	May 9-15.....	.....	1	
Valencia.....	May 22-28.....	1	.....
Syria:				
Aleppo.....	Apr. 9-16.....	.....	.....	Present.
Beirut.....	May 10-20.....	1	.....
Tunis:				
Tunis.....	May 30-June 5....	1	1	

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER— Continued.

Reports Received During Week Ended July 8, 1921—Continued.

TYPHUS FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria:				
Oran.....	May 22-31.....	10	8	
Bolivia:				
La Paz.....	Apr. 1-30.....	32	39	
Egypt:				
Alexandria.....	May 21-27.....	1	2	
Cairo.....	Mar. 19-25.....	9	4	
Finland.....	May 1-15.....	5		
Germany.....				May 1-7, 1921: Cases, 3. Additional for previous week, 3 cases.
Great Britain:				
Dublin.....	May 29-June 4....	1		
Mexico:				
Mexico City.....	May 15-21.....	15		
Poland.....				Mar. 1-Apr. 30, 1921: Cases, 11,483; deaths, 1,131.
District—				
Bialystok.....	Mar. 1-Apr. 30....	853	45	
Cracovia.....	do.....	603	90	
Kielce.....	do.....	848	62	
Leopol.....	do.....	2,508	277	
Lodz.....	do.....	521	53	
Lublin.....	do.....	1,445	83	
Posen.....	do.....	77	5	
Silesia.....	do.....	25		In Teschen.
Stanislawow.....	do.....	1,55	232	
Tarnopol.....	do.....	1,855	194	
Warsaw.....	do.....	972	61	
Warsaw city.....	do.....	223	29	
Russia:				
Siberia—				
Vladivostok.....	do.....	4	1	
Turkey:				
Constantinople.....	May 22-28.....	5		
Union of South Africa:				
Cape Province—				
Cape Town.....	May 13-19.....	10	3	At native cantonment in vicinity.

YELLOW FEVER.

Mexico:				
Vera Cruz.....	June 13-27.....	7		
Peru.....				Mar. 1-31, 1921: Cases, 66; deaths, 25.
Departments—				Apr. 1-30, 1921: Cases, 106; deaths, 32. In 13 localities.
Lambayeque—				
Chiclayo.....	Mar. 1-31.....	29	10	
Chongolape.....	do.....	2	2	
Ferrenafe.....	do.....	1	1	
Lambayeque.....	do.....	15	5	
Monsefu.....	do.....	18	4	
Motupe.....	do.....	1	1	
Pomalea.....	do.....	5	1	
Villa Eten.....	do.....	5	1	
Callao—				
Callao.....	Apr. 1-30.....	1		At quarantine station. From Chiclayo.
Lambayeque—				
Chiclayo.....	do.....	23	5	
Chongolape.....	do.....	10	1	
Jayanca.....	do.....	5	2	
Lambayeque.....	do.....	5	2	
Monsefu.....	do.....	8	5	
Motupe.....	do.....	45	11	
Olmos.....	do.....	2	4	
Villa Eten.....	do.....	2		
Zana.....	do.....	1		
Libertad—				
Guadalupe.....	do.....	2		
Pueblo Nuevo.....	do.....	1	1	
Trujillo.....	do.....	1	1	Country.